Itinerary.
U.S. Geological Exploration
of the
40th Parallel

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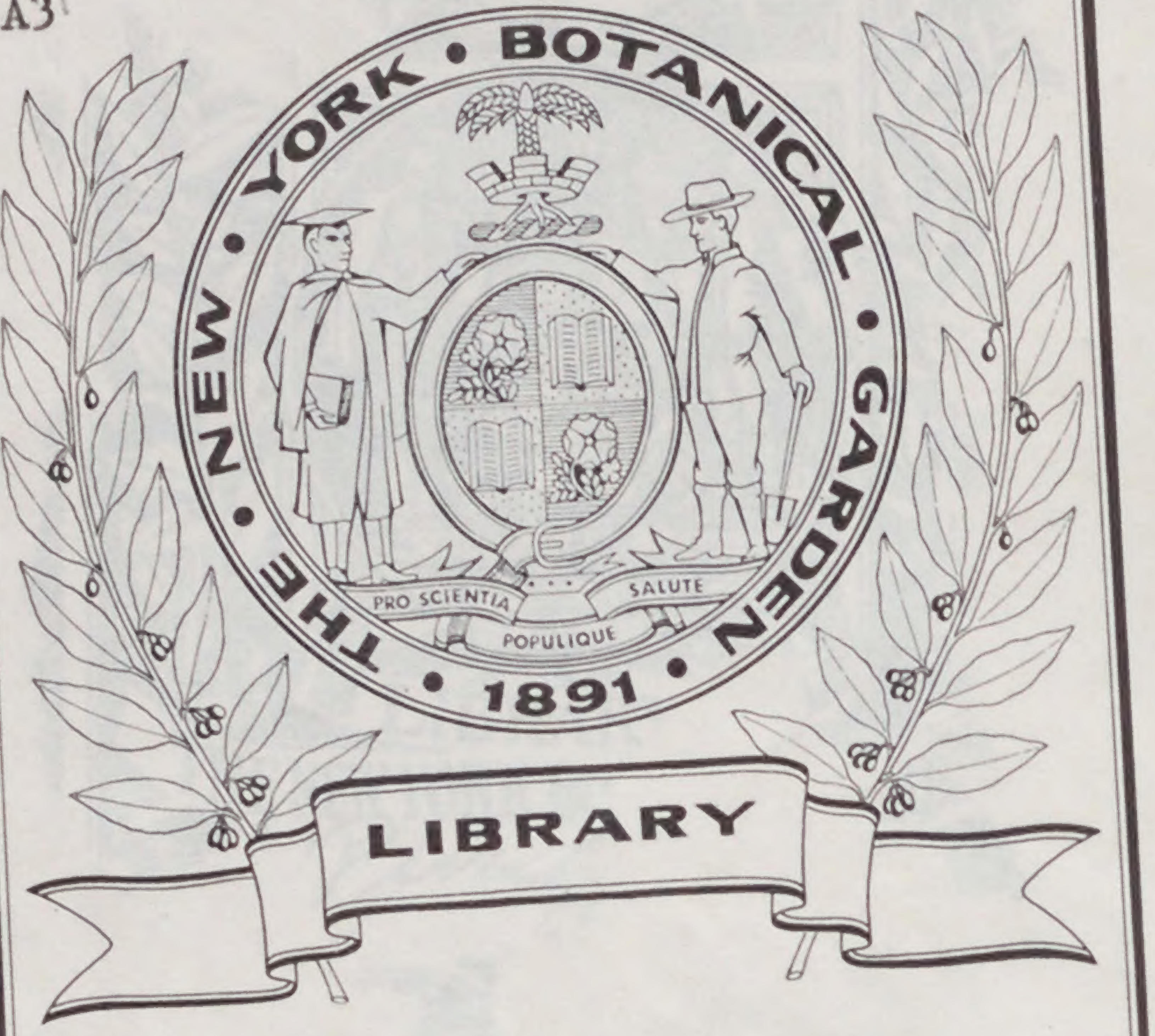
THE NEW YORK BOTANICAL GARDEN
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Wm. W. Bailey
U. S. G. E.

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NEW YORK
BOTANICAL
GARDEN

A
DIARY OF
A
JOURNEY IN CALIFORNIA
and
NEVADA.

1867 I had been acting as Assistant in the Chemical Laboratory of the Maſs Institute of Technology, when upon the 29th of April 1867, I was appointed to the position of Botanist of the U. S. Geological Exploration of the 40th Parallel. It happened in this wise.

I had become acquainted with Mr S. L. Emmons of Boston through Mr George Bradley of Providence, and learned that he was a volunteer connected with the Expedition. He asked me once how I should like such a trip, but not having any notion that I should have a chance to go, I replied in a very indefinite way. Emmons knew through Bradley that I had been in the habit of studying botany for some years, and probably spoke of me to King. At any rate, after a visit of King to the Laboratory, Emmons informed me that my name had been mentioned for the vacant position. He advised me if I desired the place, to ob-

AUG 6 1942

1867. tain the recommendation of Dr Gray or some other influential person.

The whole thing was so sudden that I could not be sure whether I desired to go or not. I had been in the army, and was obliged to leave on account of ill health. Might I not suffer in the same way now? Then, too, I magnified the dangers to which I might be exposed in that far distant and to me, unknown land. I passed several days in a phrensy of thought, not knowing what to do. In my dreams I was at one time struggling with the resistless waves, or again in a hand to hand battle with the Indians. All the members of the party were strangers to me. How should I like them? I was so delightfully situated in Boston, that I hated to think of leaving. On the other hand, such an opportunity to see our great country and to re-invigorate my health, which had been poor for several years, were chances not to be rejected without due consideration. This I gave the subject, and finally decided to go, should I be so fortunate as to obtain the position.

I wrote to Dr Asa Gray of Cambridge, always a kind friend to any of my family, and asked his advice. I desired to know whether one so little acquainted with botany as myself, could possibly discharge the duties. I also made inquiries about the members of the party. The Doctor's reply was most favorable. He said that Mr King was desirous of obtaining an experienced botanist, but at the same time a young man, and

1867. as the two things were scarcely compatible, he thought I would "do very well". He added that I might refer Mr King to him concerning me. The letter ended with the pleasing statement, that the young men of the party, were highly spoken of by all who knew them.

The problem now was to learn Mr King's whereabouts I had no idea where to write him, but thinking Miss Silliman of New Haven would be likely to know, I wrote her. I soon had an answer stating that Mr King had been dining at her house, and she had mentioned my case to him.

On the 29th just after my return to Boston from a short visit to Providence, I was on my way to my duties at the Institute, when I was stopped in Boylston St by a small boy, who handed me a letter from Prof J. D. Hague How the boy knew my name was Bailey, is a mystery to me as great as the source of heat in the sun! The note inclosed a telegram from King to Hague, requesting him to bring me to New Haven with him that day. Here was a pretty go! The train on which Hague was to leave started at 11.10 A.M., and it was 10 now. Still I must go to my room, 20 Bulfinch Street, first, and it is no small walk. I did it, however, and was ready when the train started.

In the cars, besides Prof Hague, I found his brother, Arnold, and Mr Emmons. We had a jolly ride to New Haven, where we proceeded immediately to call upon Mr King, whom we found ill at Prof Brewer's rooms

"S. S. S."

Bill of Fare

Soup Oysters on the half shell. Fish
Mock Turtle Fresh Salmon, Boiled, Hollandaise Sauce

Releves.

Tenderloin of Beef, Larded, with Mushrooms
Turkey, braise. with Olives.
English Saddle of Mutton, with Currant Jelly.
Ham with Champagne Sauce.

Entrees

Squab, broiled a la maitre d'hotel.
Fricandeau de Veau, pique a la Jardiniere.
Filet d'Agneau, aux petits Pois.
Mayonaise d'Homard, a la belle vue.
Escollop of Oysters, a l'Americaine.
Omelette, aux Comfiture.

Relishes

Pickled Oysters, Olives, Lettuce, Apple Sauce.

Game

Wild Ducks, Game Sauce.

Vegetables.

Mashed Potatoes. Green peas. Stewed Tomatoes.
Green corn. Sweet potatoes.

Pastry

Cocoa nut Pudding Pate a la Reine. Rhubarb Pate.

Desert.

Gateau decore, a l'Orleans. Charlotte Russe, a la Parisienne
Gelee au Vin de Bordeaux Merringues a la Creme.
Gateau, a la Cuiliere. Ananas, au Champagne
Creme a la Windsor Salade d'Oranges.
Pine Apples Raisins English Walnuts
Oranges, Almonds. Filberts,
Caffe a l'eau de Vie.

and Mr James T. Gardner tending him. Notwithstanding his indisposition, he kept us all in a roar of laughter as long as we remained in the room. He asked me a few questions concerning my abilities, which I replied to I hope with sufficient modesty. I was frightened enough Heaven knows

In the evening the Sheffield Scientific School gave us a farewell supper at which all the Faculty of the College, and the State Officers attended. It was a most jolly occasion. Prof Brewer displayed the identical U.S. flag which had waved over some of the highest peaks of the Sierra Nevada. The feast was emphatically a temperance one. There were a few speeches, and what there were, were good. Mr King's conversation with me in the afternoon had not been decisive at all, and what was my surprise when I was introduced to the assembled gentlemen as the Botanist of the Survey! Many old acquaintances of father were present and congratulated me. Gardner made a speech, in the unavoidable absence of Mr King, giving an account of the proposed Survey from it's inception, and illustrating by maps what the intended route was to be.

The supper broke up early in order that Gardner, Clark, the Hagues and Emmons, might catch the steamer to New York. They will precede Mr King and myself by some ten days. I stayed at the New Haven House for the night, where, by the way, the grand supper took place.

Tuesday. April 30th 1867.

Called to see Mr King and the Sillimans in the morning. Returned as far as Providence by the

Shore Line Rail Way. At the crossing of the Connecticut river, we were delayed by an accident which amused me very much. It seems that an engine was standing near the platform which gives access to the ferry boat; the engineer went to his dinner, and in his absence, an enterprising "Finnegan" thought he would take a ride. He mounted the Iron Horse, and turned the throttle valve, but to Pat's terror the engine made for the water, and seeing he must go with it, if he stayed where he was, he jumped off. The engine of course went into the river.

Upon reaching Providence, I went out to Hillwood to tell my friends there of my good luck. It was a perfectly unexpected thing to them, and I was quite the lion for the time being.

May 1st 67 Made several calls in Providence, visited the old Laboratory, and then returned to Boston. Spent the day in packing up my things, and nearly went wild about it. My room was completely furnished and every thing had to be removed to Providence immediately. I sold some things at auction at a frightful loss. Attended a meeting of the Natural History Society in the evening. Telegraphed to my brother.

May 2d 67 Busy packing all day. Called at the Institute. Attended the meeting of the Society of Arts in the evening.

May 3d 67 Still busy packing. Called at the Institute. Made some calls.

May 4th 67. Spent the day in making calls.

May 5th '67 Attended service in the morning at Emmanuel Church. Made several calls during the day.

May 6th '67 Bid goodbye to my friends in Boston, and went down to Providence. Drove out to Hillwood and bid all the family goodbye. Returned to town and made several calls.

May 7th '67 Went to the Laboratory and made my adieux. Arrived in New Haven at five o'clock P.M. Called to see Prof Brewer and had a most delightful visit. He told me numberless amusing stories of Californian experience, × and posted me up in the mysteries of plant collecting. Attended a meeting of the Beta of Psi Upsilon in the evening.

May 8th '67 Went to see Prof Brewer again in the morning, who continued his instructions of yesterday, and gave me a list of what I would require. He also, kindly furnished me with letters of introduction to many scientific gentlemen in California and Nevada. Dined and took tea at Prof Silliman's. Miss S. kindly furnished me with sewing materials for my trip. Very stormy. Went to New York by the 11 P.M. steamer, the Elm City.

May 9th '67 Arrived in New York about 8 o'clock A.M. Went to the Irving House, met and breakfasted with Mr King. Mr Custer, one of the engineers dropped in afterwards, and after some pleasant conversation, we walked down town. Met T. H. O'Sullivan, our photographer. Made a call and with my friend*, went to see Bierstadt's "Domes of the Yosemite". Spent the evening in Brooklyn.

John [illegible]

May 10th '67. Spent the day in making calls in New York and

Brooklyn. Had a chat with King and Brewer before going to bed. Received several letters.

May 11th. 67

The Voyage.

It was on a bright and beautiful May day that we started from New York for San Francisco. Two weeks before I had entertained no idea of ever seeing California, yet here I was now about to leave home as I supposed for three years. Of course much had to be done during the short time that remained to me on shore, and it was not until an hour before the steamer had been advertised to sail, that I reached her crowded wharf.

King had gone down town early in the morning with Prof Brewer, and left me to superintend the baggage, a duty which I was not anxious to perform. The express man whom he had engaged did not make his appearance at the appointed time, and I became very much worried. Finally it was growing so late, that I concluded to hire a hack, which was a piece of worldly wisdom the Survey had cause to thank me for. It was only in this way that Ridgway and I could have got off, or King have obtained his baggag

After seeing to my own traps under the guidance of

Prof Brewer, I amused myself by watching from the deck of the vessel, the people on the pier, struggling with each other, and with the shouting hackmen, whom the police vainly attempted to keep within bounds.

There is always much bustle and noise upon the departure of an ocean steamer; and even for one who has no weeping friends on shore, wishing him "God speed," and clinging to him to the last, or lifting little children in their arms to kiss a last adieu; there is much of sadness in witnessing the parting of others separating from all that they most love, perhaps forever.

Till the last moment there is an uproar on the dock. Frantic passengers rush about after missing baggage; the dilatory arrive, of course in a great hurry at the last moment; and above all the din, we hear on all sides the sad words "Good-bye" "Write often", "Take care of yourself" &c. Twelve o'clock sounds from the steeple of old Trinity, a gun is fired by the ship; and we steam slowly out from the wharf. We are off on our long journey, while those left behind, cling to every post and vantage ground where they may see us and we them unto the end. It is a cruel scene, and I experienced a sense of relief, when we had left the dear old North River, the Battery and the steeple of Trinity far behind and were steaming steadily through the "Narrows", and by the grim fortifications which protect the approach to the city.

After a sail of about three hours we reached Sandy Hook, where the pilot is usually put off in his little

1867. boat, but our steamer, the "Henry Chauncy, Captain
Gray" retained the pilot throughout the trip. Soon we
began to leave the land. About this time, we saw the
steamship Arizona of the same line, bound for New
York. She was just ending her voyage as we were be-
ginning ours, and doubtless there were many delighted
May 11th. people on board, and some who had not seen home in
nearly twenty years.

Soon after passing our sister ship, a sudden gust of wind, caused the vessel to lean or "list," as it is called, to one side. The wind was accompanied by rain, and for a few moments it looked quite stormy. It soon cleared off again, however, and appeared as bright and sunny as before.

Our state rooms were pleasantly situated on the hurricane deck- two rooms connected together, so that by opening an intervening door, we could always obtain a breeze across the vessel. This arrangement proved of inestimable advantage in the tropics. We could easily converse with each other without leaving our own rooms. Messrs King and Custer occupied one of these rooms and O'Sullivan, Ridgway and myself the other, and most jolly times we had in them.

There were some nine hundred passengers on board, of whom about three hundred were soldiers on the way to recruit the California regiments, which suffer greatly from desertion. The troops occupied the forward part of the deck, and with the exception of the sentries, were

1867 unarmed. The remaining passengers were classified according to the price of the tickets purchased. Of course the Government payed for our transportation. The classes are known respectively as first, second, and steerage, and the quality of rooms and food received ~~are~~ is in reference to these divisions. The meals of the first cabin passengers are as well cooked, especially on the Pacific side, as at the generality of hotels and restaurants. From Panama to San Francisco, the tables are furnished with fresh meat, taken on board at the Isthmus and again at Acapulco, cattle being slaughtered daily. On the Atlantic side, the meat is carried on ice, and passengers hardly fare so well on the return trip, as on the way out, for very obvious reasons.

May 12th. The weather continued cool for several days, and
L. 27°43 N. L. 74.27 it was not until the third or fourth day, that it became
May 13th necessary to make any change in our clothing. After that,
L. 22.22 L. 74.27 the heat steadily increased, so that finally an awning
May 14th. had to be spread over the deck every day.
Vessel stop- A few days are necessary for people to settle down to the
ped for a while monotony of sea life. At first the novelty of the experience
to cool the jour- prevents the time from hanging heavily on the hands,
nals. but we soon know by heart all corners of the vessel, are acquainted with the number of revolutions the wheel makes per minute, calls all the waiters by their names, and long for some amusement. Eating and sleeping are the main resources for killing time. Any thing that will afford recreation, is agreeable. The old folks play cards

1867. or chess, or draw up a chair in some shady spot and read. The lowest books have a certain interest at sea not excepting the most trashy of all novels, those of Miss Muhlbach. The young folks chase each other merrily about the deck in "hide and seek" or some such game, and are a general nuisance to all those of maturer years over whose feet stretched out at ease, they are constantly tripping, until earnest prayers are made for the soul of King Herod of Judea.

We passed Hatteras without experiencing any rough weather. Indeed no one but the officers and sailors knew when we did pass it. The consequence of the continued calm, was, that the larder of the ship, suffered fearful inroads, as all hands came promptly to every meal.

May 15th
La. 22.22. L. 74.27 The first real interest was awakened by the sight of the Bahama Islands, upon one of which it is said, that an enterprising Spaniard, named Colon, landed as early as 1492. We passed several of this group, Castle Island, Long Island, Crooked Island &c, named with an infertility of imagination and resource in nomenclature always characteristic of the Anglo Saxon race. Near the Bahamas we sailed through a great bed of sea weed, about where Columbus and his ships were imbedded in it.

May 16th
19.14. 74.33
Run 259. This morning we found ourselves steaming along the coast of Cuba, when we awoke, whose tropical forests we could see in the distance, and whose mountains capped with fleecy clouds, were in sight all day. The houses

1867. at this end of Cuba seem few and far between, and indeed I do not recollect seeing any. There were would be a long stretch of beach; then the land would rise in terraces, as natural in appearance, as if made by a landscape gardner. This is not meant for a sarcasm, though it may wear that seeming.

On the extreme point of the island, there is a lighthouse, the light of which is noticeable in the night time, at a very great distance.

Soon after we had passed here, there was a sudden cry of "man overboard!", and in less than a minute as it seemed, the steamer stopped moving, a boat was manned and lowered, and was soon pulling for the poor fellow still seen far astern, battling bravely with the waves.

We shudder as we think some ravenous shark may catch him ere help arrives, or tired out with so apparently hopeless a struggle, he may yield to the waves. Poor mother at home, are you now praying for your sailor boy? Bear up brave swimmer and you shall be saved yet! Yes! "huzza!" "hooray"! the boats crew throw up their hats, and their cheers are borne faintly over the water. They have rescued him. All honor to a crew so prompt, active, and brave, and to the Company which enforces such perfect discipline. A few minutes more and the rescued man is on deck. He was one of the hands, and was cleaning a small boat, pendant over the water, when he fell.

Now we pass the little island of Nevassa, owned by an American guano company, and an American ship is lying at her wharf with the stars and stripes flying. Our ship, too,

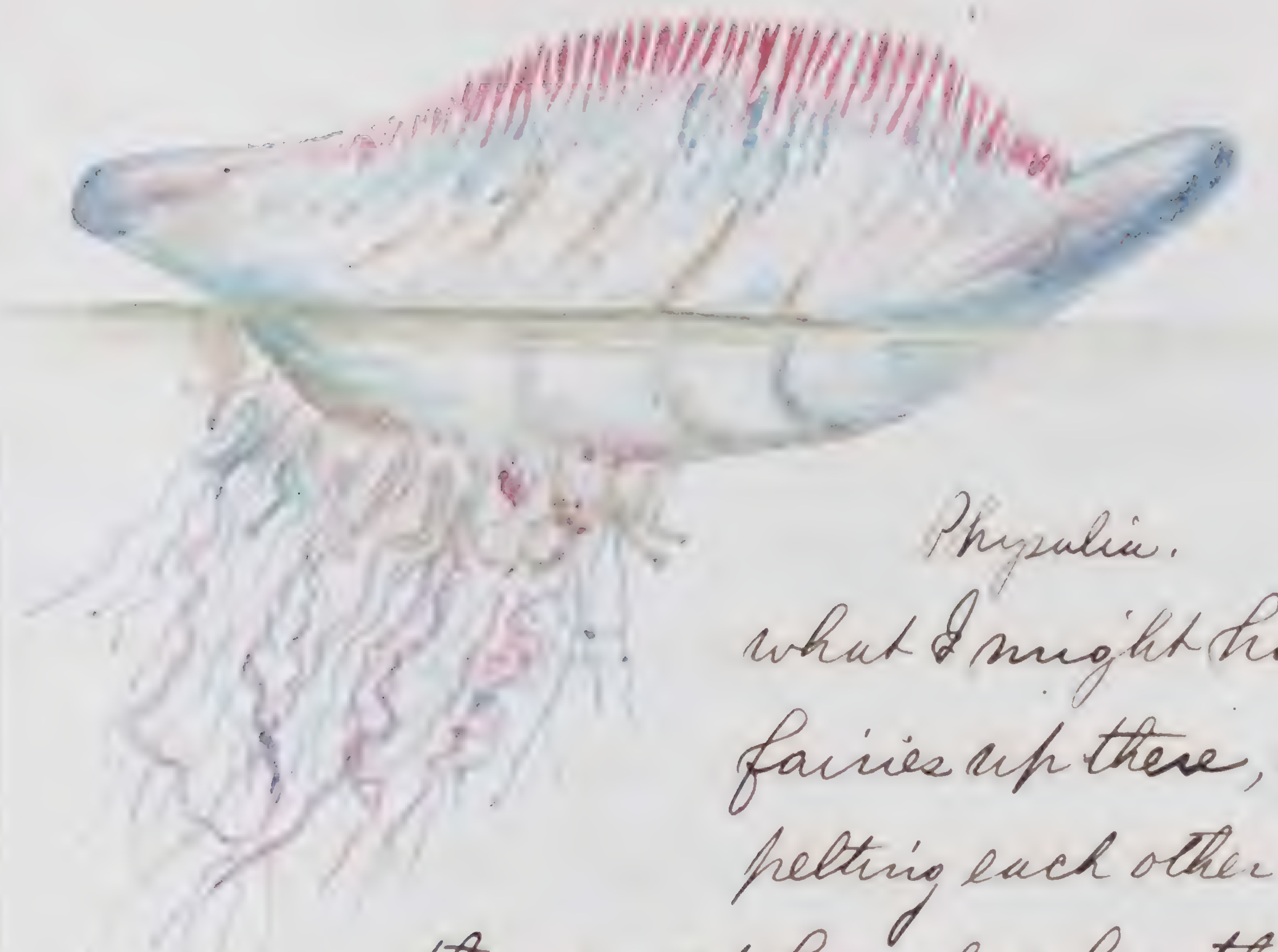
1861 raises her flag and fires a salute. Towards evening, we
can see the misty outline of San Domingo, but do not ap-
proach near enough to form any idea of the coast. Here
May 17th. we met the homeward bound steamer Ocean Queen and ex-
15°.29". 76°.45" changed mails, a small boat with the purser being sent
Run 258. from our ship to her colleague.

When the return steamer first comes in sight, every one begins
to write busily, and there is generally a large mail to send
back to New York. We are now in the Caribbean Sea, and
will not see land again until we reach Aspinwall. The wate
is often very rough here. Now however, ~~the water~~ it is calm and
with a most perfect tint of blue. It is actually azure. Taking
refuge on the shady side of the ship, for the heat is awful,
I used to watch the flying fish, as they sped from wave
to wave glistening in the sunlight, and sometimes I would
May 18th see a "Portuguese Man of War" (Physalia) sail by, a brave
11°.41". 78°.40" little ship colored like the rainbow, "in the tricksy pomp of
Run 254. fairy pride", and hung about with graceful streamers.
Distance
from Aspinwall
157 Miles.

"It sails mid isles whose summer smiles,
No wintry winds annoy;
Whose groves are palm, whose airs are balm,
Where life is only joy."

Occasionally a school of albacor would swim near the
vessel and it was great fun to see them turn somersaults and
disappear. In the evening, the sunset clouds are much prettie
than any we ever see in our colder climate. They are not so
brilliant but more delicate. They pile up on the horizon and
look like great drifts of snow, or piles of bleached wool. I us

867.



Physalia.

to think how jolly it would be to take a good long run and bounce right into the middle of one of these inviting clouds. Who knows but what I might have found some queer little fairies up there, ~~and~~ dodging about and pelting each other with balls of cloud! How they would laugh when they saw me tumbling in among them! and perhaps all putting their little shoulders to a cloud they would roll it over on me!

Now while I have been talking about the clouds and allowing my imagination to go "wool gathering", the short twilight of the tropics has passed, and night has come upon the sea. But it is a bright, clear night, with all the stars twinkling like angel eyes, and we see the constellation of the Southern Cross, some of us for the first time. The ocean has it's stars too, and shines a "phosphoric sea". The water glitters with myriads of luminous animals, and especially in the wake of the vessel, it is alive with them, now in masses of stars like the "milky way", and then in single points. The masses are probably the "noctilucae", and the solitary stars, "medusae". Nothing can equal these warm tropical nights. It seems a pity to retire and lose so much beauty, but finally we do so, and in our dreams, confusing the many ideas of the day, imagine we see sailors riding astride of voracious sharks, and flying fish dodging among the clouds.

ay 19th

We arrived in Aspinwall after a nine days sail from New

1867

York, and the sight of its green trees and shrubbery was very refreshing, after having seen nothing but water for so long a time. We were all anxious to go ashore and view the wonders of tropical vegetation, to taste the luscious fruits, and to admire the pretty paroquets and other birds which the natives offer for sale.

Before going on shore, I watched the sharks swimming about the vessel & following the small boats of the natives. They were huge fellows, some of them, I should think, fifteen feet long, and the bay seemed full of them. Having a few hours to spare before the cars should leave for Panama, I spent them in wandering about the little town. It is a queer place, with cocoa nut trees in the streets, and stores full of bananas and other tropical fruits. The negroes who sell these about the ~~streets~~ town, are but half dressed, and most of the children, and there are hundreds of them, are dressed as some one says "in a palm leaf hat and a cigar". From constantly eating bananas these urchins have a tremendous abdominal developement, wh as they grow older is absorbed, like the tail of the tadpole. The town is built on a low, swampy island, and is naturally very unhealthy, while the danger from sickness is increased by the masses of filth that are allowed to accumulate about the hous Great, unclean buzzards are often seen sitting upon these heaps of dirt, or flying in long, and graceful circles over the stagnant ponds.

Saw the re-
mains of the
British steam
er blown up
by nitro-glyc
erine See Page
30 and 51

It is said, that for every tie or sleeper, laid in building the Panama Railway, a man died. This is hard to believe at first, but we find that even during the few hours we rema

1867. on the Isthmus, as few are taken ill with fever. The luscious fruits are very tempting, but it is not well to eat them while on shore. Taken out to sea, no ill effect is produced by them.

The engine bell now warns us to secure seats in the cars, for the train is always crowded, and he who comes late, fares badly. The soldiers were sent in advance by a special train. Indeed all the trains on the road seem to be special, and the time table is dependent entirely upon the arrival of steamers. The troops were loudly cheered as they entered the cars by the few native sentinels lounging on the wharf. These South American soldiers offer but a poor looking apology for an army. They are lazy, no two of them seem to have the same uniform, and from the appearance of their old muskets I don't think they could do much harm. One company of our well armed and disciplined troops could march through the whole country. At least so we think, but perhaps these half breeds fight well after all.

Until the cars actually begin to move, the fruit and curiosity venders throng them. It is a perfect Babel till they leave, although the various fruits, the monkeys and parrots, are very interesting.

At last we are really off, and our whole attention is now fixed upon the strange country we are passing through. It seems as though we were riding through some vast conservatory of rare plants; all the vegetation looks so unnatural to us. The flowers are without number, of endless species and gorgeous colors and often assume odd forms. Some of those hanging in the trees, look like butterflies or birds, and the insects and birds themselves are as gorgeous as the flowers. Great bunches of strange

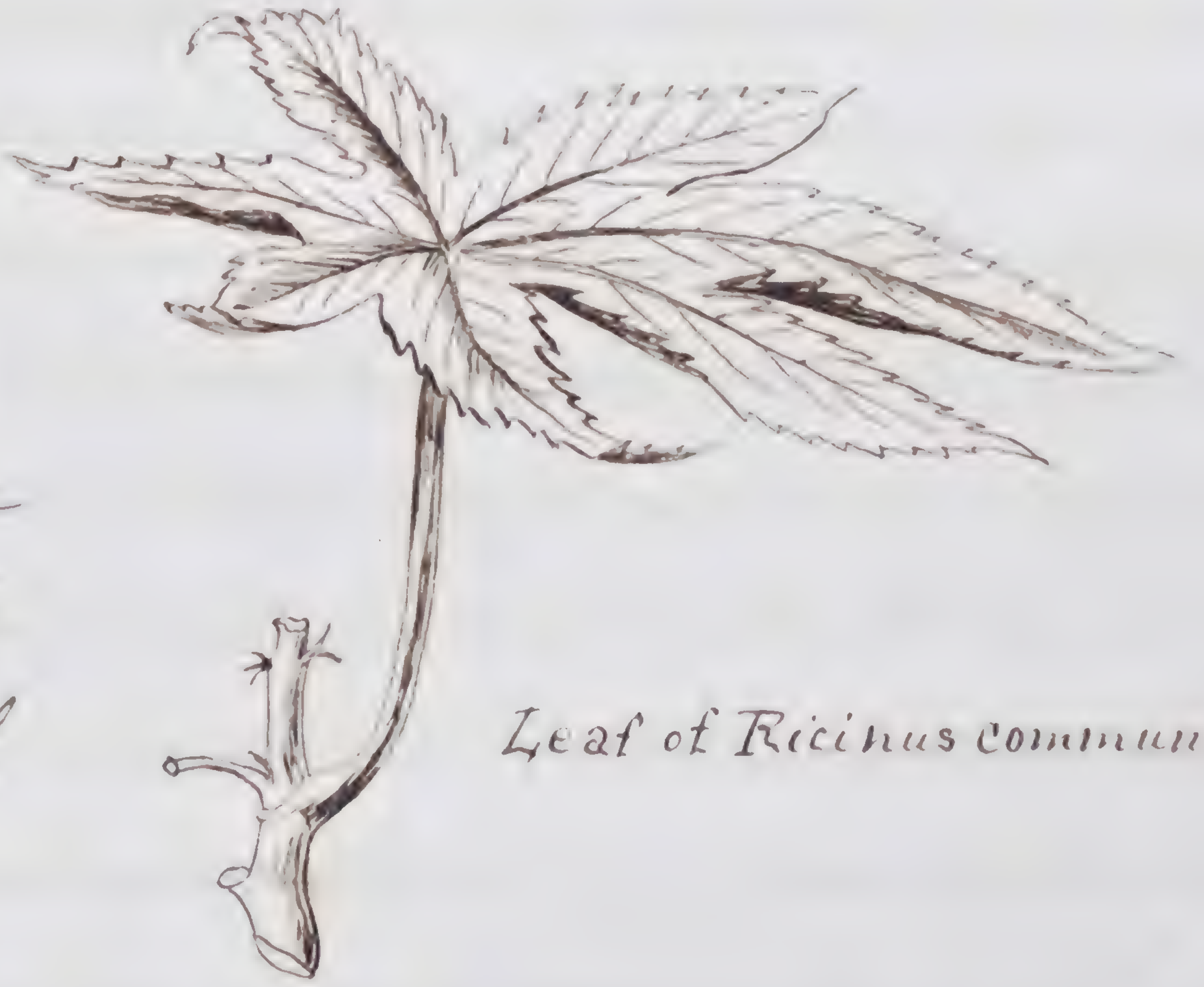
1867. looking fruits hang from the trees, which are tied together by vines or liannes, hanging in mid air, or swinging like long ropes from branch to branch. Single leaves are large enough to hide behind, and others look like green sword blades, or like broad emerald green ribbons. Few of the trees are as large as those we commonly see in our Northern woods, but there is such a mass of growth all bound together, that it is impossible to penetrate the forests without cutting one's way. Long and graceful canes droop over the Chagres, and we see a great aligator now and then crawl from beneath them into the water.

Here and there we pass the pretty white houses of the Railroa Superintendents surrounded by green trees, covered with showy flowers. The little village stations which we stopped at occasionally, are very interesting. The houses or sheds, consist generally of four upright poles supporting a roof thatched with the broad leaves of the forest. Under these, hammocks are hung, and every thing is probably pretty comfortable in dry weather, but it must be a rather damp way of living when it rains as it does here during the greater part of the year. Little Cooking i required, as the negroes live chiefly on the fruits and vegetables of the neighboring forests and upon the bananas which they cultivate. They seem to be a jolly, good natured people, and laugh merrily back at the passengers, who always quiz them with opera glasses, or shout at their comical appearance. They wear little clothing, but what they have, appears neat and clean.

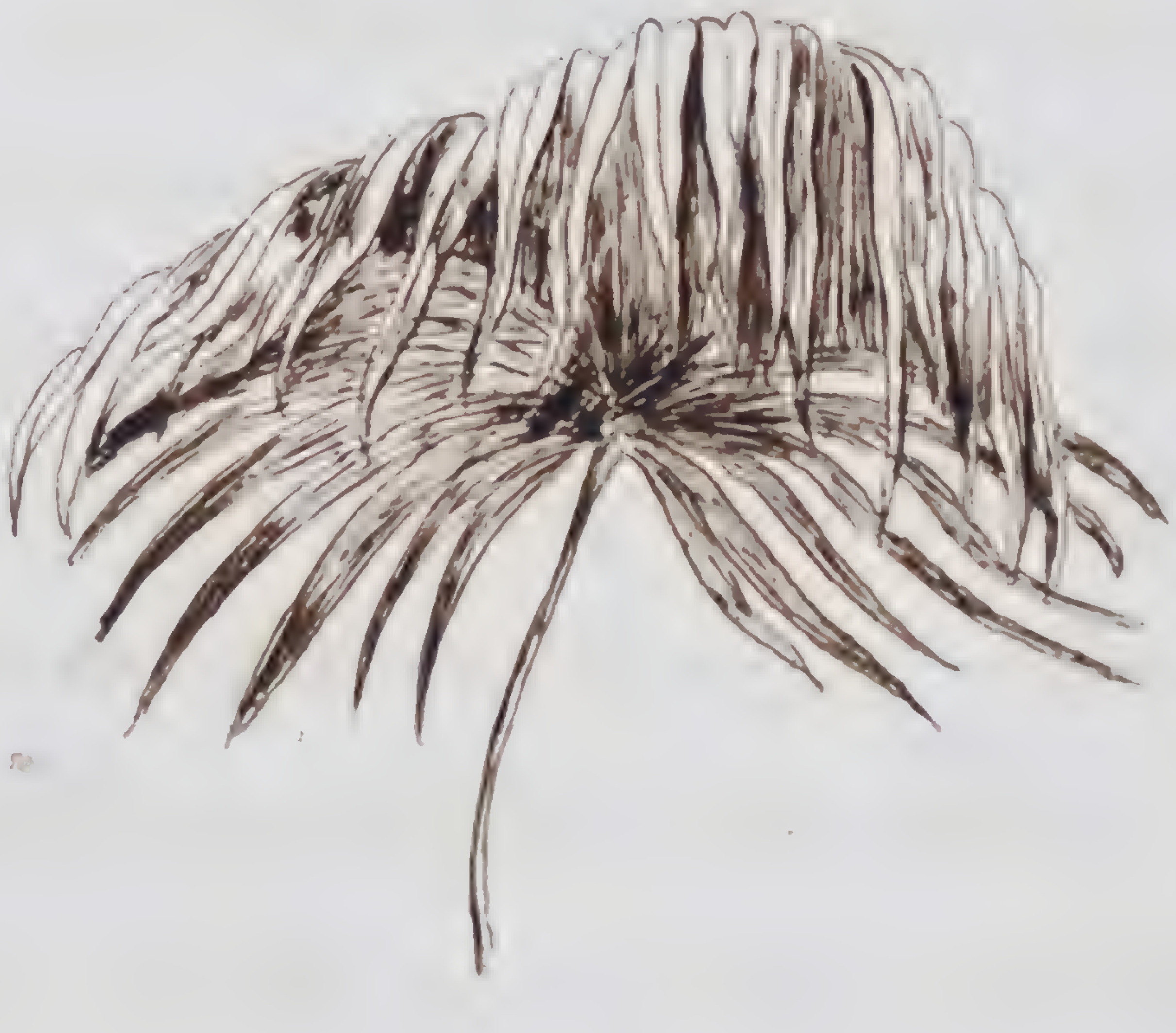
These negroes were brought from Jamaica to complete the road, when it was found that no white race could endure

1867. the unhealthy climate.

Whenever the cars stop, many people rush out into the woods and return laden with odd palm nuts, huge leaves or delicate flowers. The castor oil plants (Ricinus communis) were very common, and I made a wry face whenever I looked at them and thought of the doctor & their vile decoctions. One man shot an iguana lizard about a foot long, and brought into the cars, a cruel use of good powder and ball, as the animal is perfectly harmless and cannot be kept even as a curiosity. The grade of the road is in some places very steep, and it winds about the hills so constantly that if you are sitting in the middle or end of the train, you can half the time see the locomotive and part of the cars ahead of you. The ties of the road are made of lignum vitae, and the telegraph posts of cement, in order to withstand the attacks of ants and the tendency to decay. The car windows are furnished with shutters, but have no glass, and the seats are of cane work. Iced lemon



Leaf of Ricinus communis.



1867. ice and water are brought into the cars at the stations, with fruits, boiled eggs and other refreshments. It rained in gentle showers during the whole passage, clearing off brightly at intervals as in our own April weather at home.

In which direction does the railway cross the Isthmus? Any one will answer "Why! from East to West of course!" Looking at a map, however, we find it has a direction from Northwest to Southeast; so that in crossing from the Atlantic on the East to the Pacific on the West, we actually ride from West to East.

We did not enter the city of Panama, but were borne by the cars directly to the wharf of the ferry which connects with the steamships. The water on the bar is too shallow to allow the near approach of large vessels to the town, and the steamships of the Pacific Mail Company anchor about three miles off near a pretty group of islands, on one of which they have storehouses and coal sheds erected. The tide rises and falls thirty feet in the Bay of Panama, while at Aspinwall there is barely any tide at all. This fact has probably occasioned the popular notion that the Pacific is higher than the Atlantic.

In sailing from the wharf to the ship, we have a fine view of the modern town. The old town, some miles away, is now in ruins. It was the first European city built on the Pacific coast, and it was from here that Pizarro sailed for Peru. Here it was too, that Balboa first saw the great, unknown ocean, and took possession of it and "all lands bordering upon it" in the name of Spain.

The present houses have an aged look. They are roofed with tiles, and many of them covered with a growth of luxu-

1867. riant [illegible] vines. The harbor is very beautiful; richly wooded hills of graceful shapes sloping down on all sides to the water, which is dotted with picturesque little islands of intense green. Several American and British war vessels were lying in the harbor, and small boats paddling about in all directions. It was fearfully hot on the crowded ferry boat, and I was very glad to reach the Constitution, and take refuge in the saloon. It was a long while before I could get into my state room, nor could I obtain a civil answer to any question from the waiters. Before I obtained a chance to wash, I was quite angry and ready to pitch into any and all of the impudent Irishmen. A New York Hibernian is pretty bad, but a San Francisco one, is intolerable.

The steamers on the Pacific side are much larger than on the Atlantic, and have state rooms built over the water, and broad gaurds outside of them. Our ship had her whole upper deck arranged as a promenade, and in the day time, covered with an awning. Towards evening this is removed, and then every one comes out to enjoy the fresh air.

There was a violent thunder storm about sun set, but it did not reach us. The sun setting behind the hills, tinged them with russet and gold, and left a broad flood of light ~~at~~ upon the water; while on one side were the black cloud masses of the storm, frequently riven by lightning; and on the other the whitest clouds I think I ever saw. They were just tinged on the edges with a suspicion of red, and the delicate colors playing over them, reminded one of the changing hues of pearl. It rained in the night violently, and continued to do so during the greater portion of the next day.

1867. This was the last rain that I saw for five months.

May 20th The Constitution started in the night, and in the morning I found we were sailing in sight of land and in a southerly direction. We continued to sail south to near latitude 7° N. before leaving the great Gulf of Darien, after which we headed northwesterly. If one notices his watch now every day and compares it with the ship's time regulated by the sun, he will find it each day too fast by about fifteen minutes, and upon reaching San Francisco, there will be a difference between the time there and that of New York, of about three hours. This is what is meant by the remark we sometimes see in the papers, that a telegram sent from England to California, arrives in the latter country before it was sent. "This was sometime a paradox but now the time doth give it proof!"

Begin to copy here 1900 Mr. [illegible]

/ The wonderful calmness of the Pacific is very noticeable to any one accustomed only to the ever restless Atlantic. Often the water is as still as a lake, and no one need keep away from the table on account of sea sickness.

May 22d off the Gulf of Fonseca. Very hot! As we sail near the coast of Central America, Guatemala and Mexico, it seems as if we were taking a pleasure excursion rather than a long voyage. Often the ships sail near enough to the shore for one to see the great conical volcanoes, but our vessel at this part of her course, kept entirely out of sight of land, much to my chagrin.

The first day out of Panama, we noticed a man tied in the rigging, far above the deck, and in such a manner that he could not move. Upon inquiry, we learned that he

1867 was a waiter who had been disorderly, attempting to strike the head
steward, and the Captain had ordered him to be punished in this
way. It is very necessary to preserve order and discipline at sea,
and the Captain is a king on his own ship, even having power
to arrest passengers in order to preserve the peace.

One of our great sources of amusement was a monkey, brought
May 23d on board at Panama. He was generally tied, but sometimes
12°.26. 90°.44 escaped and climbed far out of reach in the rigging. The
Run 252 ship's crew cherished a cordial dislike for the poor fellow, and
Course often threatened to throw him overboard, but he was too agile
N. 65 West. to be caught even by them. We used to throw nuts to him just
out of reach of his paws, but nothing daunted, he would use
his long tail as a fifth and most useful hand, and fish
them in, as it were, with that. All the South American monkeys
May 24th make use of the tail in this way, and in climbing, and the
14°.38.N 94°.10W grasp they obtain with it, is wonderful. This is a distinctive difference
Run 240 between them and the monkeys of Africa, and may
N. 56 West. be considered a Yankee improvement on all the rest of the
Quadrumana. In science, however, they are classed lower
than their kindred of the Old World, who are structurally
superior and more nearly resemble man.

Our hairy friend continued full of fun, till after we passed
Cape St Lucas, when the sudden cold caused him to shrink
and suffer, and he lost all his merriment. He probably died
Course N. 70. W. before reaching port, as most of the tropical animals brought
May 25th on board, do.

16°.06. 98°.09 After crossing the Gulf of Tehuantepec, we again approached
Run 248. the shore, and had it in sight all the time afterwards

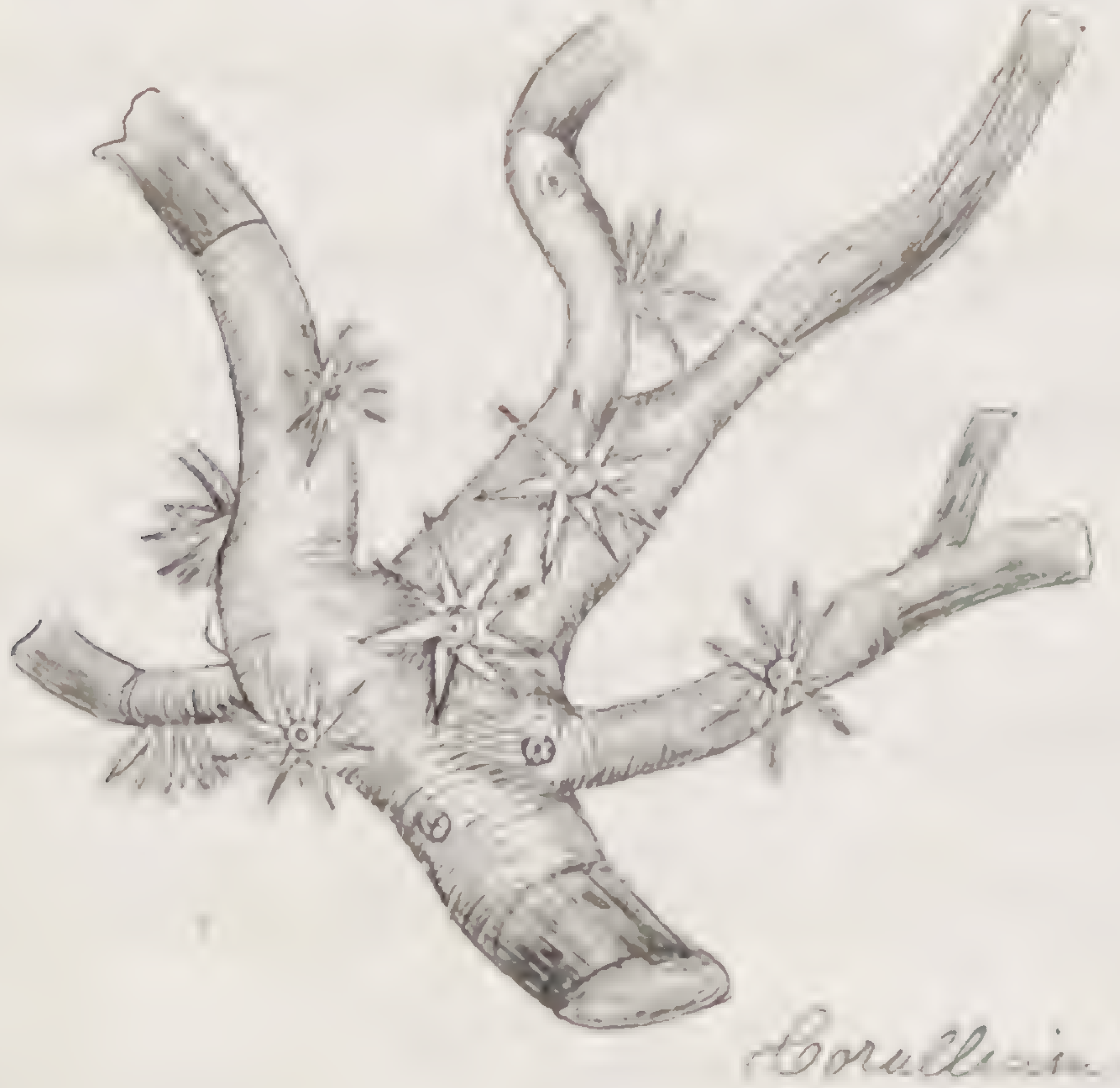
1867. until entering the Gulf of California. A false alarm of fire was given one day to exercise the men and teach them their places and duties in case of real danger. Each steamer is well supplied with boats, and has a large safety raft in addition. In case of alarm the officers of the ship stand by these boats with loaded revolvers, to prevent their being taken possession of by passengers, and to ensure an equal chance of safety for all.

L. 16. 06. Long The service of the Episcopal Church is always read on
98°. 69 W. Sundays in the morning, the Captain or Purser officiating
Run 248. in the absence of a minister. The services of other denomin-
Course N. 70 W. ations are held at other times of the day if desirable to any
portion of the passengers, but the morning service is the
only one at which the officers are expected to attend.

All the steamers of the Pacific Mail Company stop at Acapulco to take in coal. This little town is situated in the State of Guerrero, Mexico, and is one of the finest ports on the Western coast. The town is surrounded by high wooded mountains, and an island at its mouth, makes the harbor completely landlocked. A lighthouse is maintained here by the Company, and is the only one in Western Mexico.

The ship comes to anchor in the middle of the harbor, and looking back, it is difficult to tell where she entered. The town nestles picturesquely at the foot of the mountains, and on a green promontory in front, shaded by wide spreading trees, is a fort which in the late war was alternately held by the French and the Liberal Mexicans under Alvarez.

1867 A gun is fired as we enter the harbor, and another as we come to anchor. Then the health officer comes on board, and after his departure, if it be in the day time, the passengers are allowed to go on shore if they desire. We arrived in the night, and therefore lost this opportunity of seeing the quaint old town. Already the natives have surrounded the ship in their boats and log canoes. The latter remind me of Crusoe's abortive frigate, abandoned in the forest. These little boats are filled with oranges, bananas, cigars, baskets of shells and coral, and often there are pretty little squirrels beside. The natives wear thin linen clothes and broad brimmed hats or "sombreros", and are a mixture of Spanish and Indian. They have as a rule, very small and well shaped hands and feet. They are not allowed on the ship, and in order to carry on a trade with the passengers, they are furnished with a long rope on which a basket is made to slide up and down. The rope is thrown up to the purchaser, who deposits his silver in the basket, and slides it down again to the boat. The Mexics or "hombres" as the passengers call them, insist upon prepayment. After the reception of the money the desired articles are sent up in the same way.


Corallium rubrum

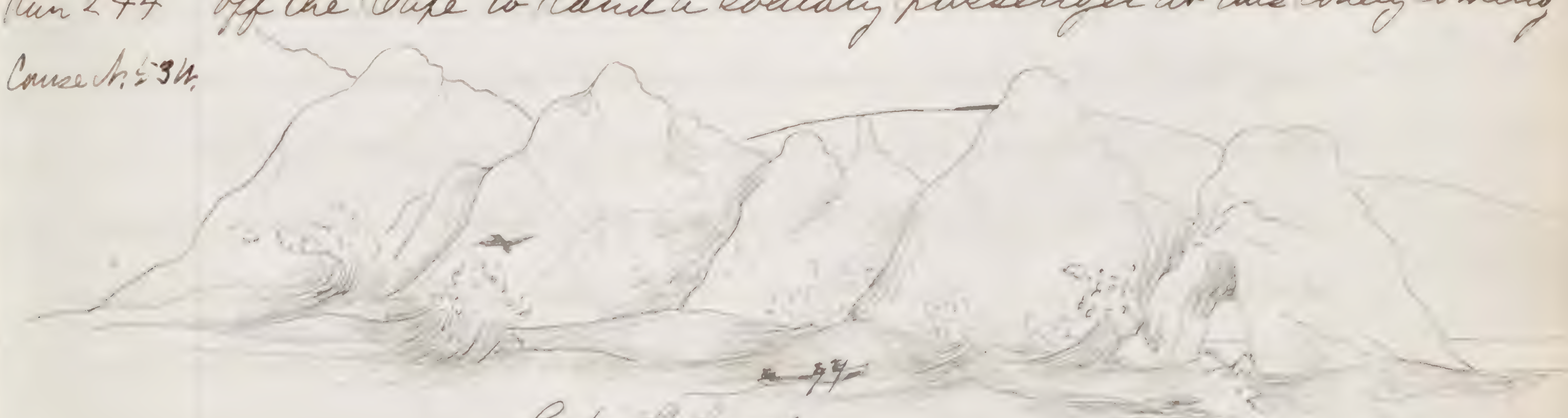
When the steamer arrives at night, these venders come out with flaming torches in their boats, and the effect of the red light upon the dark water, is very beautiful. What between the noise they make, jibbering Spanish to each other and broken English to the passengers, and the noise and up-

1867. roar of the coal heavers there is "no sleep till morn". The
shells and shell baskets sold here are very beautiful
and delicate, and for ten cents, we can obtain all the
oranges we can eat in a day.

May 26th Rose very early and saw the sun rise over the moun-
tains, a wondrously beautiful sight. The natives were
still active in their trade, some of them actually coming
on the ship. I bought some very good cigars for a mere
nominal price. About half past nine, we started off
again, and had a fine view of the town and harbor. The
Mexican flag floated over the fort. We passed near the
coast all day and within sight of the "sixty mile beach",
as smooth and level as that of Newport, and bounded
by rich groves of palm. Behind these, the mountains rise
shrouded in mists, and by steady gazing, we detect high
peaks among the clouds; so very high that we are often
startled and wonder whether they can actually be mountains.
These views on the Mexican coast constantly remind me
of Church's Heart of the Andes, with it's rich vegetation
May 27th and smiling valleys in the foreground, and the purple,
18° 18' N. 105° 44' W. hazy unreal looking mountains gradually fading into
Run 198. indistinctness and obscurity. The coloring on them is un-
Course N. 66. W. like any thing we ever see on our hills. They seem to glow
with rich purple and gold tints, over which a thin veil of
gauze has been thrown to prevent the lovely picture from
receiving injury.

Near the end of this beach, there are several cliffs
and promontories of dazzling whiteness, which can

1867. be seen a long way off. It was in this vicinity that the Steamer
May 28th Golden Gate was lost by fire several years ago. Her paddle box
20.38. 106.38 is still visible above the surf. One steamer a month, stops at the
Run 215 pretty little port of Manzanillo, but our ship did not do so, but
Course crossed the Gulf of California to Cape St Lucas.
N. 47. W. It's often very stormy in the Gulf, but our good luck still
May 29th attended us, and although there was more motion than here-
Lat Long 22.58. 110.07 tofore, it was not enough to prove uncomfortable. We stopped
Run 244 off the Cape to land a solitary passenger at this lonely looking
Course N. 53 W.



Cape St Lucas.

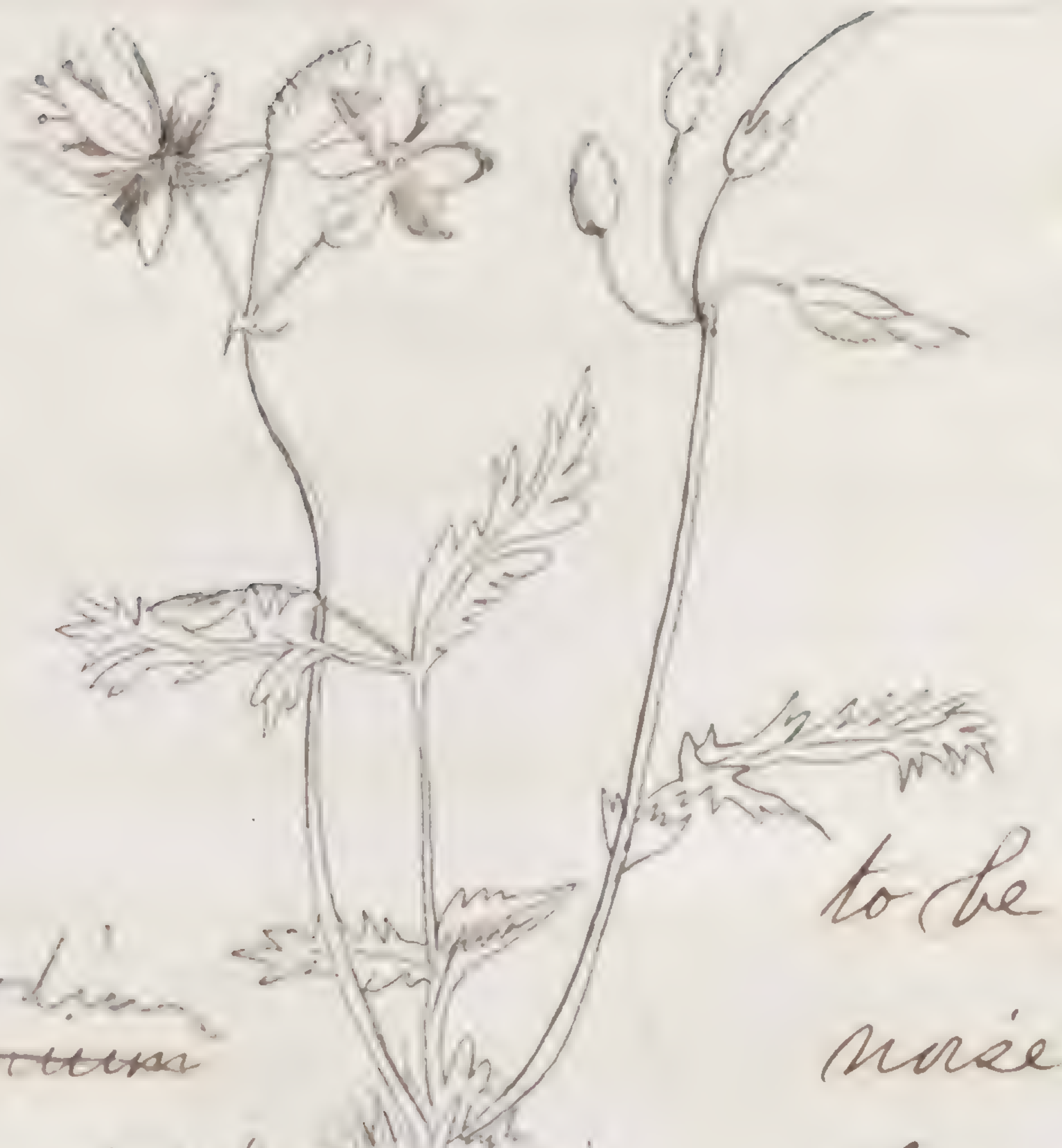
station. A small boat came off from the shore to receive him. There appeared to be two or three houses here, the only sign of life on the coast. The scenery is wild and barren, the steep cliffs rising directly from the restless waves, and being eroded into fantastic arches, pinnacles and caverns by the water. No vegetation is to be seen except the forbidding cactus. The whole western coast of this long peninsular, which J. Rosse Brown wishes the Government to purchase is equally dreary, being destitute both of water and wood. Myriads of gulls live on the cliffs and follow the vessel from this point quite into San Francisco, wheeling and screaming about the ship to pick up the fragments thrown over board from the tables. Many of these birds are snow white

1867. with clean looking red feet, and they look beautiful
as they fly in long curves through the air, often with the
wings perfectly still; or alighting on the water, are borne up
May 30th and down on the waves.

Lat 25°.37." After passing Cape St Lucas, it soon begins to be
Long 113°.19" very cold, and we were glad to resume our winter garments
Run. 240 so long disused. The schools of porpoises now afforded us
Course N.47W constant amusement, and we saw several whales spouting in the distance, or some huge fellow would show himself near the vessel, spout a great column of spray into the air, and give us a final view of his great tail fin as he dived out of sight. Fogs are frequent on this coast and now envelope us every night, so that walking on deck ceases to be pleasant. In the day time, however, we have a view
May 31st perhaps of the islands of San Nicholas, Santa Cruz &c, mostly
Lat 28.N50 sterile and the abode of sea birds. In a few days we begin
Long 116.33W to see the Coast Range of California, green and fertile
Run 265 looking and dotted here and there with "ranches". Our long
Course N.43W. voyage is nearly over, and we are very impatient and anx-
June 1st ious to have a run on dry land.

32.35. We pass through the Golden Gate, the entrance to
Long 118°.47" the harbor of San Francisco, but it is in the night, and
Run 254. we cannot realize its beauty, nor look at the sea lions
Course N.24W. sporting on the rocks, or the forts with our old flag flying.
But we do see the long line of lights in the great city and begin to have a home feeling come over us. A gun fires; then another and we are at rest after our twenty two days journey of five thousand miles.

1867.
June 2d.
Lat 35. 56. N
Long 121. 41 W
Run 248.
Course N. 35 W.



(~~Geranium~~ Erodium
Camp 1. Sacramento)

June 3d. There was a difficulty in reaching the wharf last night, a new one, and the Constitution grounded. It was very tantalizing to be at the end of the journey, and yet to be prevented from going ashore. The noise of cabmen and deck hands, and the general bustle usual at such a time, prevented sleep. O'Sullivan, Ridgway and myself finally succeeded in getting ashore, and took a hack for the Lick House. Arrived at the hotel about 2. A.M., and immediately retired. We were joined the next day by Custer and Scrivener. The latter is a young Englishman, a fellow passenger from New York.

Upon awaking, I found O'Sullivan at my door, waiting to breakfast with me. We all met at breakfast about half past eight o'clock in the splendid dining hall of the Lick, a saloon which I think has hardly an equal on the continent.

Having fully enjoyed our first meal ashore, we all went over to see the other members of the party, who had preceded us. They were staying at the Occidental, which is quite near the Lick on Montgomery Street. Our companions received us with open arms. King also stayed at the Occidental.

I was introduced to Charley Staples, one of our teamsters, a tall, fine looking, and elderly Maine man. He was one of the early emigrants to California. A procession of working men, in favor of the eight hour system, paraded the streets. During the day, I walked about the city with

1861. several of the party. We enjoyed a splendid view of the town from Telegraph Hill, and could see the Bay, the Golden Gate, Alcatras, and the green shores of Contra Costa.

We find here a city so like those we left behind on the Atlantic Coast, that we are unable to realize we have come so far, and are walking the streets of a town not twenty years old, and built upon the remote shores of the Pacific. Horse cars ply up and down the streets, and busy crowds jostle each other on the pavements. Ah! There are a group of Chinamen in their queer clothes and long cues. As we look at the "Johns", we begin to feel that we are indeed in California, and the broad ocean only separates us from the Celestial Empire. Still the stars and stripes are seen every where, and we were right in our first feeling. We are at home as much here as in New York or Boston, for the same great American people is here as there (For that matter I doubt whether it is in New York!) and freedom is offered to all here, as it is to Irishmen there.

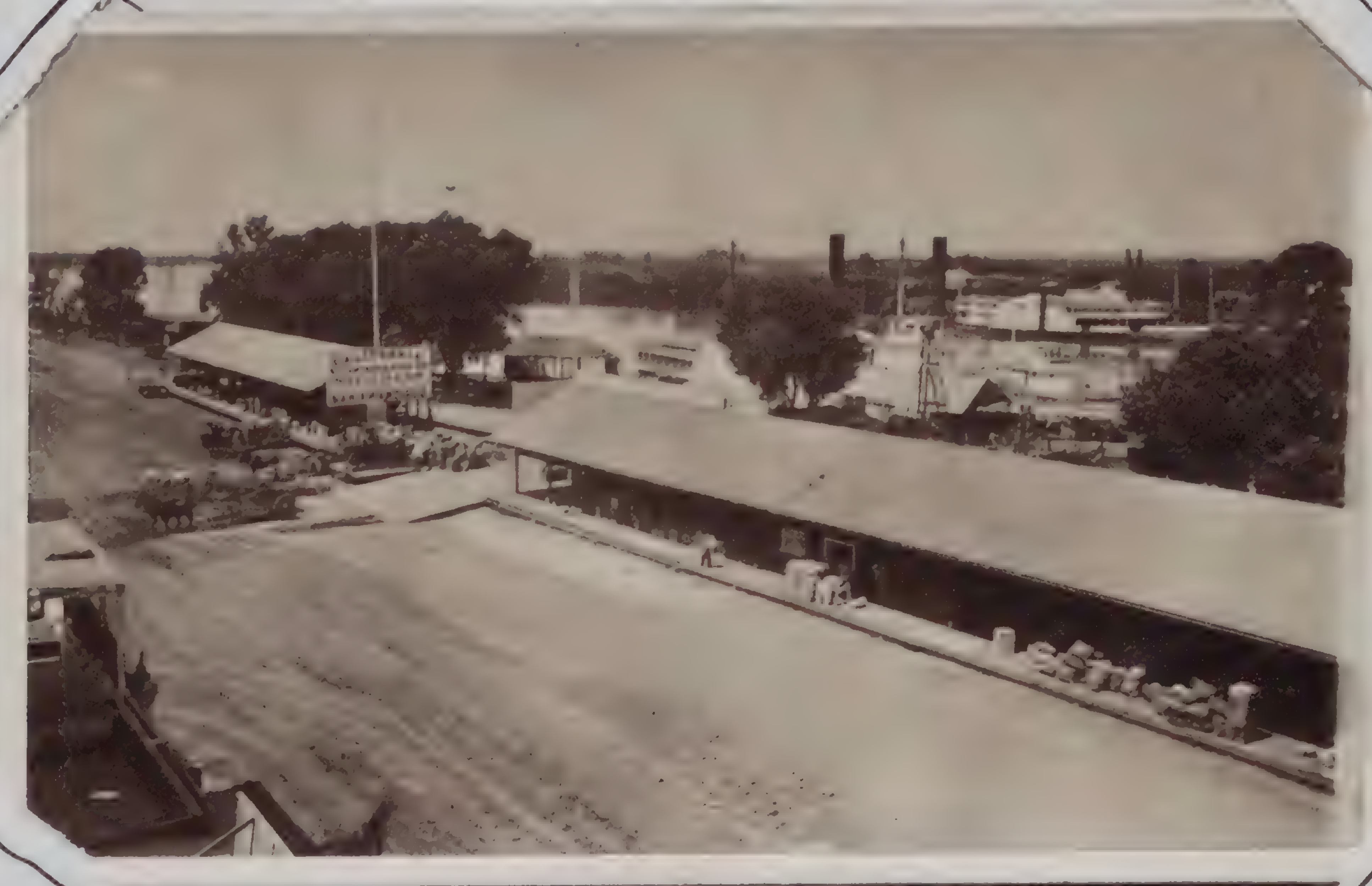
June 4th

Visited the rooms of the California Geological Survey, situated in Montgomery Block. Here I met Profs Whitney and Bolander. The latter kindly posted me on some botanical points, and afterwards conducted me to his rooms and showed me his field outfit. He was about to start on his summer tour.

King, Gardner and myself dined with Prof Silliman at the Union Club. The rooms are situated over Wells, Fargo & Cos

1867. Express Office, and must have been well located for experiencing the long to be remembered explosion of nitroglycerine in that office. Our dinner was served on the French plan and was quite elaborate.

June 5th Mr H. G. Parker Esqr, Superintendent of Indian Affairs for Neva-



The Levee at Sacramento. Central Pacific R. R. Depot.

June 6th. Arrived in Sacramento early in the morning, and sent our baggage ahead of us to the camp, with O'Sullivan in charge. The camp had been established previously by Gardner. There was a tremendous wind blowing, and we were shockingly dirty when we arrived in camp. There we found Clark, Staples, Frank Anthony, and Lew Bayless. The latter is to be our wagon master, Anthony is a teamster. Lew is sick today in his tent. Staples cooked us quite a jolly camp breakfast, to which we did full justice. The conversation was peculiar. If any one desired the milk he called for the "cow" or "sukie". Eggs were denominated "hen berries" &c. I took a botanical stroll and found many plants that were new to me, and one old friend of the gardens, here growing wild, the Eschscholtzia Californica, or Chryseis. In the evening, O'Sullivan and I walked into the city. Not

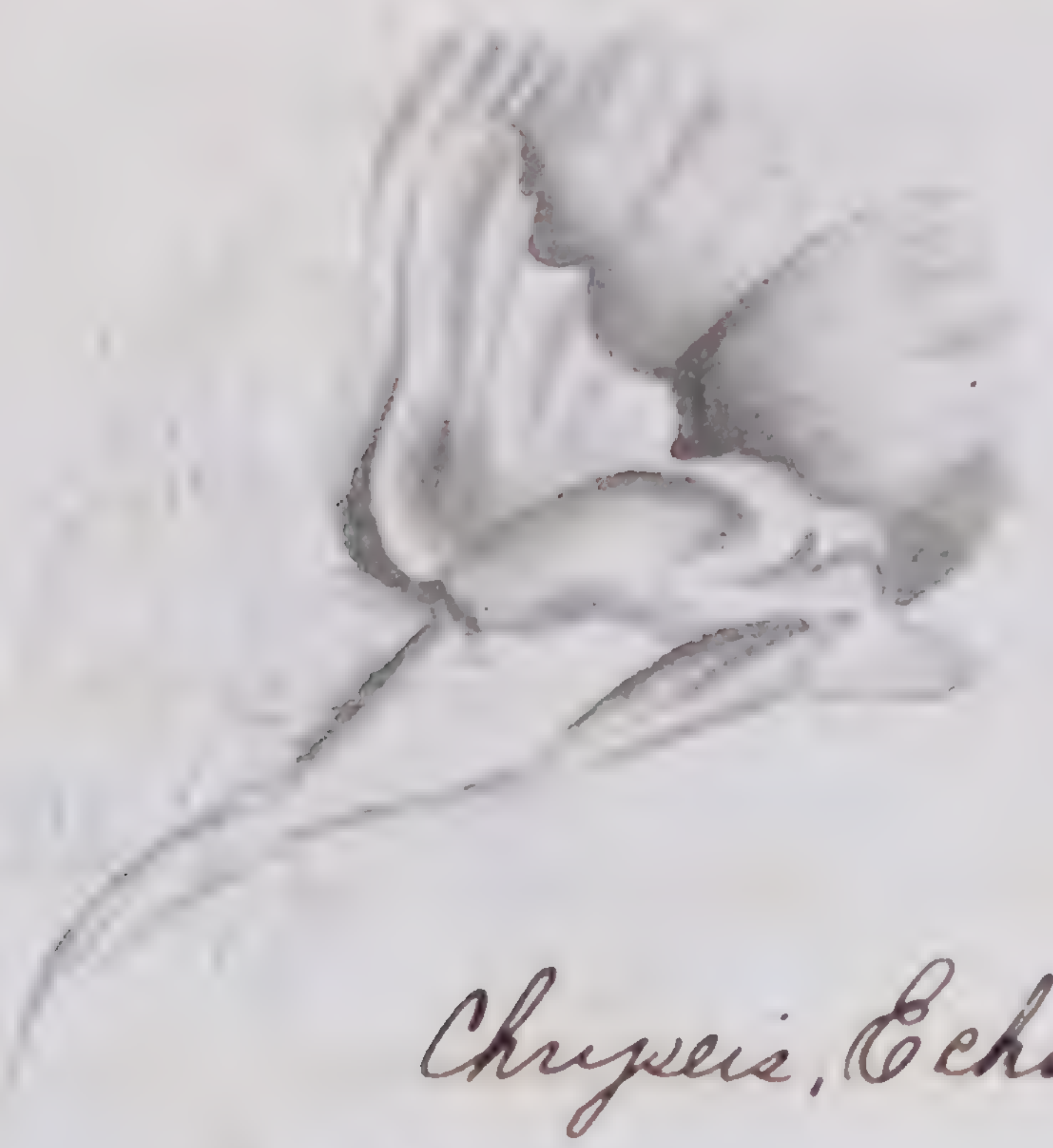
1867. having enough tents pitched for the accommodation of all, we were rather crowded. Custer, Clark and myself had a tent together, Custer and myself sleeping in the same bunk.

June 7th. Turned out about 6 A.M., and after breakfast walked in town with O'Sullivan and spent the morning in shopping. The greater part of our instruments arrived. King came up from "Frisco".

June 8th. King returned to the Bay. I enjoyed (?) my first mule back ride and never have felt so awkward but once in my life, i.e. when I first endeavored to hold a baby. For particulars as to my appearance, any person is reffered to T. H. O'Sullivan for my first ride, and to my brother for the infant experience. If I had suddenly been set astride of a locomotive with steam turned on and engineer and stoker asleep, I should not have felt less at home. My impression is that the hybrid took matters very much into his own hands. I experienced a deep sense of relief when I landed in safety from this dangerous voyage on unknown seas.

Sunday June 9th. Attended service at Grace Church, Sacramento, and heard as poor a sermon and music as the most wretched taste could desire. There was full choral service moreover, dragging out the agony to the "minutest all spice". A funny incident occurred during the service. A foolish or idiotic man entered the ~~office~~ church, and the officious sexton endeavored to eject him. The consequence was a rather unseemly scuffle and noise, and that, too, in the middle of the sermon. The Rector, the Rev Mr Hill stopped and called

1867. "Billy (?) go out!" "Peter sit down!" whereupon the natural departed and the choleric Peter subsided. In the afternoon I renewed my attempt to ride and to saddle my animal. This latter accomplishment I don't see my way clearly towards perfecting. Where each man gives advice, there is little hope of obtaining information unless by accident or through strong native sense.



Chryseis, Echsoltzia Californica.

June 10th. Ridgway went shooting in a grove of oaks near the camp in the morning and I accompanied him. It was amusing to see him climb trees which looked impossible to me not actuated by the same enthusiasm. He went after nests or birds which

Central Pacific Rail Road Depot, Sacramento.

shadow of two large and leafy cottonwoo

We have six wall tents with flies and shelter tents innumerable. Clark and I now have a tent alone. In each there is a sort of bunk, consisting of boards supported on stakes driven into the ground. Under these we store our trunks.

1867. A little rack is made in front of the tents for the reception of saddles and a stand for a wash basin. Where the whole country is so very level, there is little to speak of in the way of scenery. There are great enclosed pastures all about us. The land is low and in Spring is overflowed to quite a depth. The days are very hot, but the nights are as a ~~whole~~ rule, cool and and comfortable. We are much annoyed by flies which swarm the tents in myriads. Every evening we have a grand fight with them, belaboring them with towels, until we get the tents quite clear, when we close them for a few hours to prevent the return of the pests. There is a sort of pool or pond near the camp, remaining from the winter freshet, where we occasionally take a swim, but it is a dirty place and we will have to give up the practice.

June 11th Went shopping in the morning ~~in the morning~~ in the mule wagon, and was thrown about in a truly marvelous manner. The animals are very spirited and quite unmanageable. I took my usual ride in the afternoon.

June 12th Went in town in the morning. In the evening Emmons arrived with Col Rand and Major Flint. One of these gentlemen had known O'Sullivan before in the Army of the Potomac. They had a long talk over old times.

June 13th King and Longhurst arrived. The latter is to be our Chief cook, and looks as if he might wash the inside of bottles. He is an old Cornish sailor with whom King became acquainted in the Yosemite Valley. He acted

1867 as custodian of that wonder for the State Commission. His strong point in cookery is his dough (duff) or sailor's plum pudding. He brings his horse Billy with him, a fine animal afterwards ridden by Prof Hague. Senator Conness visited the camp in the evening.

June 14th. The whole camp arose early in order to join an excursion over the Central Pacific R.R. to Cisco, by invitation of Senator Conness. Clark and I started to go, but Clark stopped in town to get shaved at the last moment and the train did not consider us of sufficient consequence to wait. We returned to camp.

June 15th. Went shopping in the morning. O'Sullivan photographed the party in various attitudes.

June 16th Sunday Very warm. Stayed in camp all day. There was a German festival in the oak grove near us, to which railway trains ran from town all day - at intervals of ten minutes. The revellers made a great noise until a late hour. Several of our party went over to see the doings. We all had invitations. I did not go. It seems strange to a New Englander to see Sunday so little observed. Indeed, it seems a perfect holiday. I confess to a prejudice in favor of a religious observance of the day.

June 17th. King went to San Francisco, ↓

June 18th. (The above departure of King should be written here.)

June 19th High wind. Employed myself busily in sewing my botanical dryers together in mats, in which work I was kindly assisted by Charley Staples, at such times as he could leave the cooking. He is assisting Longhurst in the kitchen. The latter consists of a trench dug in the ground, across which two iron bars are stretched for the support of kettles and pans. The

1867. The fire is built in the trench, which is hardly a foot deep. A round hole is dug for the bakery or oven, which is a circular iron vessel provided with a cover, and supported by four legs. It bakes bread to a charm. It is wonderful what good victuals we have here in camp. I challenge Delmonico to surpass our boiled mutton and caper sauce.

The bell mare has been designated as my special and particular beast, from her exceeding quietness and propriety. I have little reputation as a horseman. I took a short ride on my new property this afternoon. She is a white mustang (?) spotted with brown sesquioxide of iron. I named her Jennie. She is the only animal in the train which can be easily approached and caught when in the pasture. The pasture is quite near the camp and the animals are turned loose into it, with a long rope tied to them to assist in their recapture. In order to catch them, all hands have to turn out and corner or "corral" them, while Lew or Frank lasso the wildest. In doing this, they are often dragged about the field by an unruly mule, but by bracing the feet in a peculiar manner and throwing the riata behind them, the mule or horse is finally mastered. It is quite an art to use the riata properly. Several of the fellows have been practising with it with astonishing results. The evening was cold and we all gathered about a large camp fire and listened to snake and bear stories while we smoked.

We added to our stock daily for some weeks, Gardner going out into the country every day to hunt up new an

1867. Crials.

June 20th Very hot. Drove into Sacramento twice with the wagons. Worked upon my botanical papers the same as yesterday.

June 21st Worked at my papers, a most tedious job. Every mat has to be unripped, one set of papers taken out and the whole sewed up again. The atmosphere is so dry here, that the usual thickness of dryers is not required. Took my usual ride. If I were iron plated or rubber cushioned my equestrian exercise would be more pleasant.

June 22d. King and Emmons arrived from Frisco, accompanied by a Mr Cowles, a fellow passenger from New York, and who is soon to leave for China. He and Ridgway went out hunting, mule back. The latter has very much my experience with his animal, the mule being the master spirit.

June 23d. Sunday. Had a bad head ache and stayed in my tent all day. A few of the fellows went to church.

June 24th. Emmons, O'Sullivan, Cowles and myself went on an excursion over the Central Pacific R. R. to Cisco, the present terminus of the road. It is six thousand (6000) and some odd feet above the sea. The summit of the pass is about seven thousand (7000) feet. The road crosses some fearful cañons on dangerous looking trestle work, and the cars have to climb all the way from Sacramento. It takes about four hours to reach the summit. The scenery of the road is quite varied and very grand. Cisco is quite a town, but apparently has but an ephemeral existence, the houses consisting merely of unplaned and unpainted timber. We secured rooms at the little station, where by the way, we were served with a cup

1867 ital dinner. The bill of fare which is very long and varied, is shouted into one's ears by an overgrown boy, in a truly marvelous manner. It must take hours of study and natural dramatic genius to acquire this accomplishment. I have tried in vain to imitate it. There is a good deal of snow about the town in drifts, and we enjoyed a summer snow ball fight. We climbed one of the neighboring peaks with much exertion, as it was very warm and we had to scramble over fallen trees and rocky debris, and to scale great drifts of snow. I was quite out of breath when we reached the summit, where we all reclined upon a rock and smoked. The whole mountain is covered with a great variety of beautiful flowers, often immediately contiguous to great beds of snow. I found a lovely little plant of a creamy whiteness and most exquisite perfume, resembling our eastern Erythronium Americanum. I also found a Lupinus, Veratrum, Allium, Smilacina, Delphinium, Castilleia, Aquilegia and many other plants. In descending the mountain, Emmons and I were simultaneously struck by a phenomenon which neither of us can account for to this day. When we beheld it, we turned towards each other and laughed for a while without a word. The thing was ludicrous enough. It looked as if a cart had been that way for wood, but strange to say, a large tree stood directly in the middle of the only possible track, but the ruts continued beyond it. We voted that we now had ocular proof of the power of two things to occupy the same space at

1867. the same time. Evidently the wagon had gone through the tree. We took another walk after supper, when we visited the lower town, about half a mile from the upper. Emmons and I thought we would follow the railroad back, as the nearest way, but had to climb a tolerable Pelion before we reached it, and had a long walk for our pains after we did.

Emmons and I occupied a room together, excellently ventilated, as we could see light through the walls and ceiling. It was quite a cool night.

June 25th. Returned from Cisco, starting at 7 A.M. My original brief diary states "I saw many things which had escaped my attention yesterday." What these interesting objects might have been, I have not now the faintest conception. "Hence we see", the necessity of saying what we have to say before the facts cool off. Upon reaching camp, we found that the Hagues had arrived. Our whole party is now here, and I will state their names, residences and what I know of their previous history.

Clarence King, Geologist in Charge, is a native of Newport R.I. Lived for some time at Irvington N.Y. and crossed the plains to California in 1864. He was a member of the California State Geological Survey until he went east last fall to inaugurate the present Expedition. He made the Survey of the Yosemite Valley and discovered and climbed the highest peaks of the southern Sierra.

James Terry Gardner, Chief Topographer and Astronomer, is from Buffalo, N.Y. and is an intimate friend of King; a companion with him at the Sheffield Sci-

1867 entific School at New Haven, and a fellow traveller across the plains. They were also together on the California Geological Survey.

Prof James D. Hague of the Maſs Institute of Technology, is from Boston and is a son of the Rev Dr Hague, a distinguished Baptist minister. He is the first Assistant Geologist of the Survey. His name is already well known in the Scientific world from his notes on the South Sea islands and the Copper Regions of Lake Superior. He was educated at Friburgh.

Samuel L. Emmons is from Boston, and is a graduate of Harvard College and of Friburgh. He is at present a volunteer, but hopes to receive a regular appointment next winter. He is one of the Assistant Geologists. He is the only member of the party with whom I was originally acquainted.

1868 He has his regular appointment.

Arnold Hague, Mining Engineer, is the brother of the Professor and was likewise educated at Friburgh.

Henry Custer, 1st Assistant Topographer is a Swiss now resident in Washington D.C. He is our only married man. He surveyed in California in the early days, and has been connected with various Government parties, such as the Northwest Boundary Survey, and the Survey of the Mississippi Valley.

Fred A Clark, Assistant Topographer is from Laporte Indiana. He was an aide on Gen Woods staff in the

OBITUARY.

James H. Hague of New York, a well-known mining engineer and President of the North Star Gold Mining Company of Grass Valley, Cal., died at his summer home in Stockbridge, Mass., yesterday, of heart failure. Mr. Hague was born in Boston in 1836 and received his scientific education at the Lawrence Scientific School at Harvard and the University at Augusta, Ga. He received his practical experience in the Calumet and Hecla mines and in California. He was consulting engineer for the State of California for several years, but for the last 20 years had lived in New York. He leaves one son.

[illegible]

Cumberland.

nway, Zoologist by title, and Ornithologist in point
is a native of Mount Carmel Illinois, and had
'is home until he joined the Expedition. He is not
yet seventeen, but is very highly recommended by Prof Baird of the Smithsonian Institute, with whom he has corresponded for some years, and with whom he worked for a few weeks before sailing for California. Impossible cliffs, thorny trees or dismal swamps, alike fail to deter him when in pursuit of a bird. He was my most frequent companion in my walks.

T. H. O'Sullivan, Photographer, is of Irish descent. He was connected with the Army of the Potomac during the most of the war as photographer at Head Quarters, and is now from Gardners Gallery in Washington. He and I became great friends always tenting together - and chumming generally.

W. W. Bailey. Botanist was born at West Point N. Y in 1843. He is a graduate of the Scientific School of Brown University, as much as anyone can be called so where no degrees are given. He now hails from the Mass Institute of Technology where he has lately been Assistant in the Chemical Laboratory.

Richard Cotter is from Missouri and crossed the plains with King in 1864. He was with him also on the California Survey. Afterwards he accompanied the Russian American Telegraph

1867 Expedition and from cold and exposure had his brain effected. He acts quite strangely at times, standing in a fixed attitude and gazing steadily before him. He is a barometer reader. King is much attached to him.

June 26th. Went shopping in expectation of our early departure into the field. Had a long ride in one of the mule wagons. We all used to get into these, sitting where we could, on the floor, regardless of trousers, and start off for the town. Numberless were the attempted runaways of the mules, some of which threatened to be dangerous.

June 27th Received a few lines from Prof Brewer inclosing a letter really belonging to my landlady, Mrs Bailey, in Boston. Brewer wrote on the back a few words of advice about riding and added "a kicking mule is worse than a rolling ship, you bet!"

June 28th.

June 29th. Took quite a long ride with the Hagues and Emmons, to the infinite peril of my neck. We rode in the direction of Sutter's Fort, a classical structure of which little now remains but an adobe house of very peaceful appearance. We stopped to get some lager at the Brewery and smoked sundry cigarettes, while I longed for the time that the ride would be over and I should be landed in safety upon terra firma. To my chagrin, the fellows decided to ride through Sacramento to the little town of Washington opposite, and across the bridge. This we did, and a ridiculous sight I must have been to any Californian who observed me. I laugh

1867. now myself at my vain efforts to stick on my horse and at the same time be comfortable, but at the time it was no laughing matter. We visited a stable in Washington kept by one Shoulders who dealt in horses. Emmons engaged him to send one out to the camp tomorrow, Sunday. They think nothing of trading on Sunday here. Washington is a mere name.

Sacramento is quite a large city built on low grounds and until very recently, subject to inundations from the two rivers the Sacramento and American at whose confluence it is built. A levee now protects it and the town itself is being raised. Still there is always much stagnant water about, and the place is unhealthy and musquito infested. But where we are camped we are hardly annoyed at all by these pests. There are some pretty residences and lovely gardens in the town. It is the seat of the State Government, and a handsome Capitol is now being built. There is some talk though, of moving the Capital to some other place.

It was confoundedly hot when we returned to the camp. We all had a jolly lunch in town first, however, at a French Hotel. I have the impression that I took some claret but am not sure.

Sunday June 30th Stayed in camp all day. King, Gardner, and Clark went out to dine. Mr Todd, a photographer from the city visited O'Sullivan, and treated the party to a basket of champagne. My commentary upon it on that occasion, will do now, namely that it "went the primrose way to the everlasting bonfire." We had a jolly dinner, with much wit and consequent laughter.

1867
July 1st. We expected to start today on our journey ~~of~~ over the Sierra Nevada, but the march is now postponed until Wednesday. King is to join us at Hunters' Station on the Truckee. Very hot in the evening

July 2d. Engaged all day in preparations for the start. Weather exceedingly hot. In the evening, O'Sullivan and I walked in town and did some final shopping.

July 3d. We all rose early, partook of a hurried breakfast, and spent some two hours in striking camp, and in catching the horses and mules. We finally started off in rather a straggling and ignominious manner. I expected to suffer a good deal from riding, owing to my previous abrasions, but did better than I anticipated. We rode all day through groves of stately oaks, overhung with mistletoe, and without underwood. It seemed as though we were passing through some great pleasure park in England. Of course it was hot, and an occasional rest at some ranche, and a glass of water, were very refreshing. At one of these halts, I caught my eye glasses in the trappings of my saddle, I suppose, and lost them. I was not wearing them, but had them tied by a lanyard. They were a great loss, although I had a pair of spectacles besides.

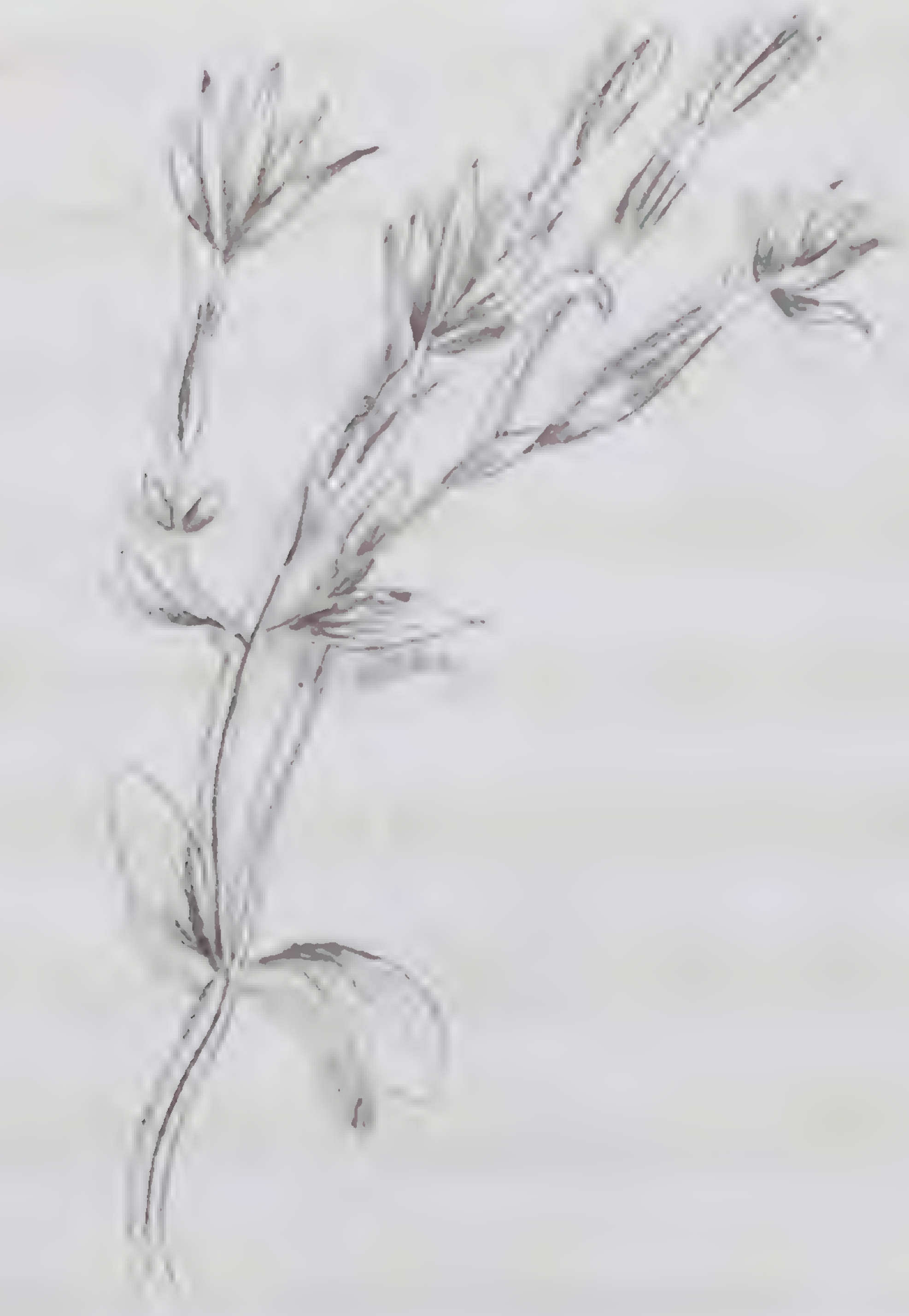
The grass was quite parched and brown, but the foliage of the trees seemed little effected by the season. Our lunch at noon was enlivened by circus performances of a highly exciting nature. Several of the mules cut up peculiar shines with different members of the party, of which little James Clark and O'Sullivan were the especial heroes.

1867 Clark had to walk a mile or two after one mule. I came into
our evening camp in gay spirits after the day's jaunt, and with
no additional bruises from riding. Our saddles are of the Mexican
type with high horned pommel, cinch and tapidero or covered
stirrup. Each man looks out for his own horse and saddle and
is responsible for keeping them in order.

We camped in a little oak grove nestled in a valley, near which
a dilapidated corral offered a slight protection for the animals.
Longhurst and Staples got us up quite a tolerable supper, which
had full justice done it. I had previously assisted in bringing
Camp 2. water from a well at a neighboring ranche, and didn't
like the fun. After supper, O'Sullivan and I lighted our pipes
and went exploring upon an old railway near by, which seems
out of use. We all retired quite early. The Camp is designated
No 2. that at Sacramento being No 1. Distance travelled, I
should think about twelve or fifteen miles. I speak above of our
retiring. This is scarcely true. We all lay down where we happened
to be, wrapped in our ample blankets, until driven out
by ants, when we moved to some less frequented spot.

July 4th We rode twenty four miles today through the village of
Auburn, where we had been told we should stop. Gardner, Emmons
and the Hagues left us this morning to visit Dutch Flat.
Fred Clark was left in command of the party. We entered the
foot hills today, but the oaks still continue. Noticed a great
deal of a species of Erythraea, which the teamsters informed
me was called "rattle snake weed" and is used by the Indians
as an efficacious cure for the bite of that varmint. Camped
towards evening near the "California House," in a pig stye, or

1867 at least so near it, there was no fun in it. The camp was subject to the incursions of the porkers all night. This was too much for O'Sullivan, Bayless and myself, and we moved our blankets, by kind permission of the proprietor, to the porch of the hotel. I have suffered with neuralgia all day, in consequence ~~to~~ of the unusual exposure, and the excitement of my new life. Managed to sleep, notwithstanding the pain. I believe we cracked off a pistol or so in honor of the nation's nativity. "Heavy firing heard in the direction of Sacramento, supposed to be" people rejoicing.



Erythraea.

Camp 3.

July 5th. Started off about 8 o'clock A.M. and passing through the town of Colfax, encamped about a mile beyond. We took our usual noonday lunch of cold meat, and fragments left from breakfast, and also stopped for a time at the hotel in Colfax where we enjoyed some lager. We are quite high up in the world tonight, in a little valley among manzanita bushes (Arctostaphylos glauca) Our animals are in a barn at some distance from us. We always have to feed them both night and morning before we can take any food ourselves. After supper, I walked up to the little station house, where, by the way, I had previously

1867. enjoyed a good wash. Here I found Clark conversing with
a colored man who wished to join us. He cannot hire him till
Camp 4. Gardner comes. He has been a cook at a restaurant in Colfax.
This little place is named after the Speaker of the House, Schuyler
Colfax.

July 6th. We are fairly in the mountains now, and have had an awful "getting up stairs" all day. The great coniferae are around us now in all their glory and of many species. The flowers are multitudinous. I never saw any thing like it before outside of a pleasure garden. From the road, we had a good view of the town of Dutch Flat. Near here, we met Gardner who had come up with a friend from the town, to see the train go by. Passed Gold Run and Alta and camped two miles beyond the latter place. There is a station on the highroad at this point, with a large stable. The proprietor told us he had prospered greatly before the railroad had killed out his traffic. In common with all his class thus effected by the road, he is very bitter against it. The water at this station is most delicious. In fact the water on the Sierras is beyond champagne, nectar or lager bier. It has not it's equal on the planet. We were all as cross as bears when we reached camp this afternoon and I was no exception to the rule. As we are to spend Sunday here, I might as well describe the site, which is wild and beautiful.

Around us are splendid coniferous trees of great size and height straight, and of beautiful outline and proportion. At one side of the camp, there is a steep descent to a wild mountain stream, near which passes one of the flumes for the supply of the mines and hydraulic works below, with water. The whole bank

1867 is covered with flowers of infinite variety and wonderful
beauty. Many genera claim my acquaintance and smile
a glad "how d'ye do" as if inquiring about their fair cousins
of the east. The species as a rule are quite different from our
eastern ones. A few travellers are however met here, but whether
they came across the country or went thence from here, the Lord
only knows. Among these was the Epilobium angustifolium
or common "willow herb" whose feathery seeds insure its propagation
Camp No 5. every where. A flowering raspberry resembling our
eastern Rubus odoratus, but with white flowers, was common. I
also found Aquilegia formosa and many other plants. The
opposite side of the stream is even steeper than ours, and rises
to a much greater height. It is as thickly wooded. In the day
time a breeze blows up this ravine, and at night and in the
early morning in the opposite direction, as indicated by our
flags. Of these we have three, the United States, the Geological
and the Astronomical. The Geological has a red ground
with two hammers crossed in white. The animals are branded
with the same mark. The Astronomical is blue with a
lone white star.

Sunday Our first Sunday in the field. It was spent by
July 7th most of us in writing to our friends at the East, and in
cooling down from yesterday's heat and temper. Went with
Ridgway to the little dam from which the flume takes its
rise, to have a bath. We found the pond full of snags
and the water very cold, but succeeded in the object of
our visit. Found many pretty flowers in my ramble. Gardner
and the rest arrived.

1867 July 8th. Started early. The scenery grew bolder and the view looking down into Bear River Valley was particularly fine. I rode ahead of the train most of the day, and any amount of urging by voice or spur couldn't induce my mare to do more than walk. Lunched at Wilsons ranche, where I found that Custer and Ridgway preceding me, had gone on tick for their dinner. This ranche is in a green and lovely valley, in which there is a race course, where a race is to take place some time this week. A gay theatre company passed us on the stage. We passed through the lower town of Cisco and encamped just beyond on the bank of the Yuba, a beautiful stream

Camp 6. with rocky and wooded banks, covered with most brilliant flowers. The water was most deliciously cool and refreshing to the taste. I noticed here a great deal of Gilia pulchella, and a species of Phlox with pink flowers in the greatest profusion, forming extensive mats. Its leaves were awl shaped. This camp offered but a poor place for the horses to stand, and we had a great deal of trouble with them during the night. O'Sullivan and I spread our blankets on the flat top of a large boulder, where we could look down upon our humbler brethren. Nature had prepared for our reception by previously laying a carpet of pine needles over the inequalities of the rock. Ridgway occupied a similar pebble near by. Marryatt, the colored man who wished to join us at Colfax, has been hired by Gardner and joined us today. The night was very cold, and we found our blankets white with frost in the morning.

"The track going east, ascends 2500 feet in 50 miles and descends 6000 feet in 75 miles" Bowles.

July 9th. The heavier portion of our baggage had been sent on before so as to relieve the teams. It was brought up by railway as far as Cisco. The first thing this morning then was for the teams to load up with this

1867 extra freight, after which we rode on till about three o'clock P.M., when we reached the Summit Meadows.

A broad and green amphitheatre was our camp ground, through which a clear stream went gurgling, and furnished us with water. The peaks all about us were covered with snow. A row of logs, probably at one time a fence, but now prostrate, served to tie our horses to temporarily, but they were afterwards removed to an upright fence, and we fell heir to their previous position for the arrangement of our bedding. We had supper late and found the difficulty to be owing to a row between Longhurst and Jim Marryatt, a feud by the way, which was never healed. And here I must say something about Jim, who became a necessary institution with us. ×

Camp 7. He is very tall, well formed and of light color, and is really fine looking. As a cook I have yet to find his equal. With or without materials his dinners are always good, and when he has all he desires to work with, they are superb. He plays poker with any and every body and almost always wins. This propensity to gamble is a common fault with his class in this region. He claims to be from Liverpool. He originally crossed the country overland and spent some time in Salt Lake and Virginia Cities. He always dresses tastefully. When he first joined us, he assisted the cook and did the washing for the party and received but small pay, but he finally became chief cook and handled plenty of "rocks". As a good cook is half the battle gained in such a life, we must consider ourselves very fortunate in having acquired this invaluable man.

1867. We had a big fire built after supper and all gathered around it muffled up in our overcoats and smoking our pipes. It was as pretty a scene as I ever beheld. We told many stories and laughed merrily till we turned in. It was an awfully cold night, and in the morning we woke up covered with frost.

July 10th. We had a cold breakfast as the tin cups and plates soon cooled off and conducted away what heat our slap jacks and other viands originally contained. After feeding and watering our horses we started off. Gardner, the Hagues and Emmons rode ahead of us as they wished to visit the summit tunnels of the Central Pacific R. R. As usual I rode near the train with O'Sullivan. Suddenly a scene of great beauty burst upon us, as we reached the summit and looked down upon Donner Lake, a liquid gem set in the eternal mountains. Beyond it the ranges succeeded each other until the eye lost them in the delicate haze of the distance. The foreground was wild in the extreme. Exposed peaks which have battled with the elements for contless ages, rose on each side of the narrow defile and walled in the road. Drifts of snow twelve and fifteen feet in depth were frequent. Here are the great tunnels before referred to, the main obstacles ~~in~~ to the great overland railway, and which are now happily overcome. I did not myself visit them. I saw the Chinamen at work, however, as it seemed on the very brink of a tremendous precipice. Afterwards I had additional cause to be aware of their whereabouts, as will be seen further on. O'Sullivan's photographic eye was tickled at this really splendid view, and he and I leaving our horses, climbed a little eminence in order to enjoy it fully. We were obliged soon to return, however, owing to the ex-

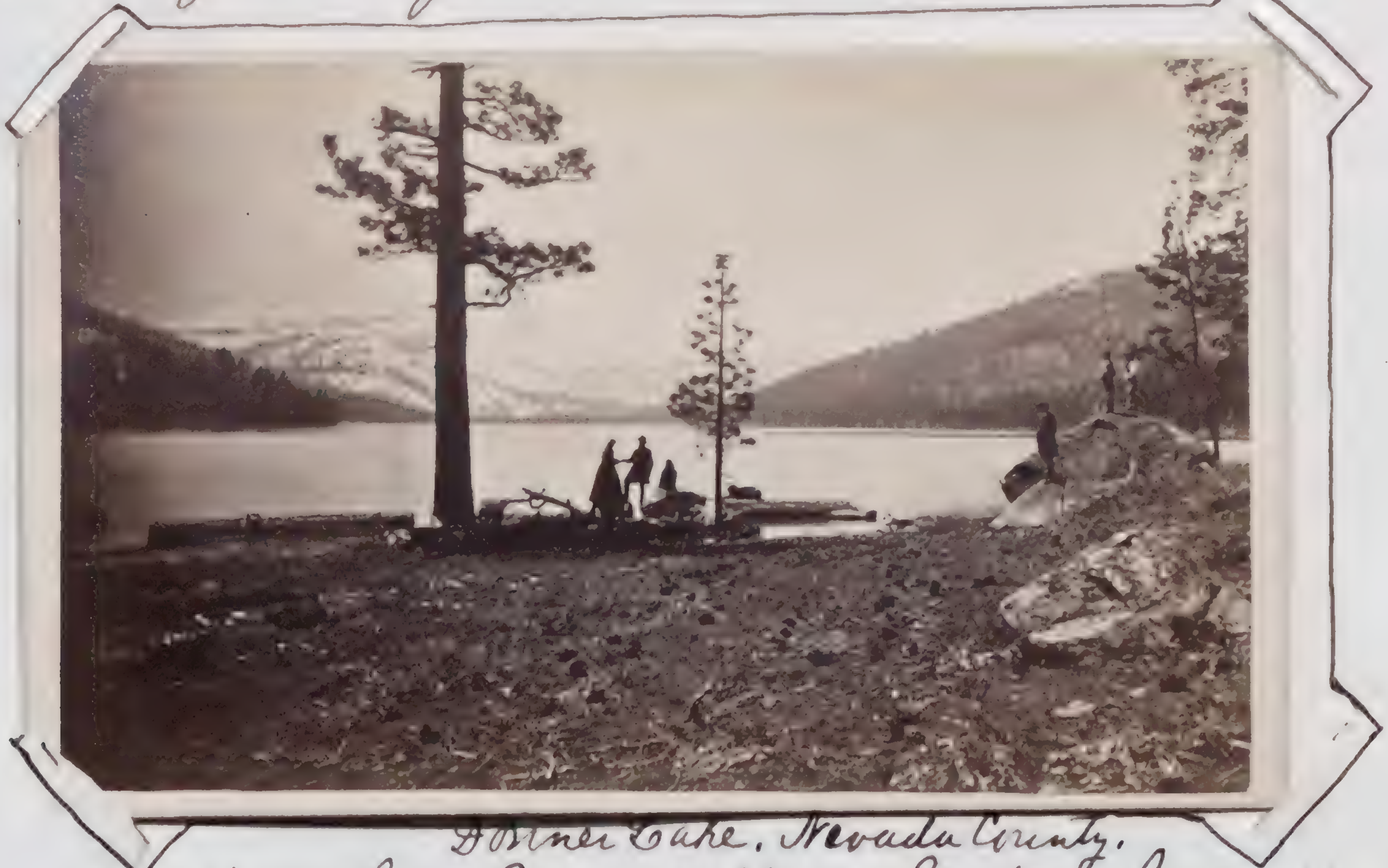
1867 treme restiveness of our animals, and were proceeding to follow the teams which had just begun the descent, when we were warned by the workmen to seek shelter and if possible to recall our companions. We shouted to them but they were already out of hearing, so that all that remained for us to do was to seek self protection and await results. The road made a bend here as well as a descent, and while we were quite removed from danger, our companions with the teams were fully exposed.

We could see the Chinamen far off on the face of the cliff running from the impending blast. At this distance they resembled ants. After a pause an explosion took place, and then others in rapid succession, and huge masses of rock rolled down the surface of the precipice. Our teams escaped injury, but it seems to me miraculous that they did. The drivers told me that they and the animals were more than nervous for awhile.

After waiting for some time, O'Sullivan and I ventured to proceed, but did not feel safe until quite removed from all danger of a repitition of what we had just witnessed. The highway makes a very rapid descent here. I suppose we must have gone down a thousand feet in an hours ride.

I should mention that nitroglycerine is used in blasting on the Central Pacific, and is manufactured from glycerine and nitric acid as required. It is too dangerous to keep on hand. Upon reaching the valley of Donner Lake, the road became level again. This lake and pass were named after the Donner Party who experienced so great sufferings and privations here in early days. The lake is a most

1867 beautiful sheet of water, reflecting from its mirror like surface, the snow covered peaks around, whose feet are bathed by it. The road skirts the lake for a long distance, and forms a most charming drive.



Donner Lake. Nevada County.
View from Pollard's Hotel. Eastern Summit in the distance.

I have no doubt this will be a fashionable resort upon the completion of the great railway. A marked change in the vegetation is observed immediately after leaving the summit. The trees are scarcer and of less variety, being mostly Pinus ponderosa, and the herbage is much less rich in species and the flowers fewer than on the Western Slope. Towards night, too, we begun to meet the "sage brush" Artemisia tridentata, the typical plant of the great desert basin.

View from the Foot of Donner Lake, Nevada County.

I was exceedingly fatigued during this days ride, was sore and could scarcely keep wide enough awake to stick to my saddle. I was rejoiced when we finally reached our camping ground at a station

1867. Camp 8 called Russel's Valley where there was a pretty green meadow and a grove of pines. A little stream wound through the valley, in which we bathed. We camped in the grove and turned our horses into a corral.

July 11th Gardner, the Hugues and Emmons rode ahead as usual. We had a fine road today and made a very rapid descent. Our lunch at noon was enlivened by Dick Cotter, who treated us to Lager. He would not partake himself. After descending a long and steep declivity, we entered Nevada at Crystal Peak. Here we found our outriding Geologists who had been examining a deposit of coal (graphite?) in the neighborhood. After a short rest we again rode on as far as Hunter's Station on the Truckee River, where we encamped by a lively little stream tributary to that river. Hunters is an important station on the stage road to Virginia City and one of the points where horses are changed. A connection is also made here with the Idaho Stage Line (It is somewhere in this vicinity that the town of Reno has sprung up since our visit.) The hotel is quite commodious, the meals fine, and the landlord most hospitable. All trees have now disappeared except what we can see at a great elevation on the mountains and a few straggling cottonwoods (Populus monilifera) on the banks of the Truckee.

Reflection in Donner Lake.

The little stream we are camped on, however, is fringed with willows and other shrubs, in which we made bowers for ourselves. Custer's particularly, was quite sylvan in it's elegance.

1867. The Truckee is a large and rapid creek. It would not be con-
sidered more in Virginia. It is crossed at this point by a
Camp 9. bridge. The sage brush is now very plenty. One of the shrubs
prevalent here seems to a species of plum or peach, and is
prickly as most of the plants in the Great Basin are, generally.
This now covered with it's little drupes containing a large stone
and proportionately little pulp.

July 12th. We remained at Camp 9 today, to wait for Mr King who was to have joined us here, but he did not arrive. I climbed one of the sandy hills near by, and seated on a rock, took a sketch of the view back towards Crystal Peak. I also employed myself in washing my clothes, which I found to be a serious undertaking, not from the accumulation of dust so much, as from gross ignorance of the process. Then, too, I imagine, a running stream of cold and hard water, is hardly the proper fluid for such a purpose. Went across to the Station after supper, to see the stages come in. The horses, all harnessed and prepared, await the arrival of the stages each way. They come in at full speed crowded inside and out. A few men jump off for a refreshing stretch, while the less fortunate ladies, remain shut up within.

July 13th. King failed to arrive today. Continued my washing operations of yesterday with equally poor success. Wrote to Lode, and observed the arrival of the stages the same as yesterday. There is a Post Office here, (but no houses but the hotel) and a Wells, Fargo & Co's Express Office. In fact an office of this company is found all through the West wherever there is a house or station.

1867.
July 14th

As Gardner considered the cost of grain too dear at this place and Kinio still failed to arrive, he ordered the train to march to Glendale, or Stone and Gates' crossing of the Truckee. I rode near the teams with O'Sullivan, while most of the party galloped ahead. Soon after crossing the river, Lew Bayless' team broke down, and his patience also I should judge from the way he swore. O'Sullivan rode ahead to bring up assistance, while I remained with the team for an hour or so. Lew became impatient and climbed the hill to reconoitre, while I sat under the shady side of the wagon out of the way of the heels of the mules. In the mean time a heavily loaded team came up, and as our disabled affair occupied the road, had to turn aside into the sage brush. Finally Lew returned and insisted upon my rejoining the fellows, and I consequently rode ahead and found them encamped back of the hotel in Glendale and upon the bank of the Truckee in a "lovy lovel" spot. Willows drooped over the stream and shrubs and herbage were abundant. Here the river flows through extensive meadows producing abundance of hay and vegetables. The native grasses are mostly grown, but our own well known "timothy" (Phleum pratense) has been introduced to some extent. The place is sometimes called Truckee Meadows. Into one of these fields which was inclosed, we turned our animals loose but with ropes attached by which we could catch them more easily. Charley Staples' "thorough brace" was unloaded and Frank Anthony went back with it to get Lewis' load and assist him gen-

1867 cially. The peculiar atmosphere in this region magnifies objects as I noticed today in riding through the sage brush. The mountains didn't seem to draw any nearer as I approached them, but were distinct even in their minutiae when viewed at a great distance. Glendale is a pretty little village with some good stores, and a neat hotel, much frequented in summer by the elite of Virginia City. A bridge crosses the Truckee here, by which a road leads to Virginia. The Camp 10. town was built in 1858. The Indians of the neighborhood, of the Piute nation brought us some good sized trout for which Longhurst and Staples traded with them-and beat them down to a reasonable price. These Indians are a hard looking set, and will hang around a camp all day if allowed. A species of Mentha abounds here, which we use for mint sauce. It tastes like penny royal. The latter grows here also. A beautiful thistle is seen near the Truckee whose stem and leaves appear as if chased in silver, and the flower reminds one of a large paint brush charged with ~~crimson~~ scarlet lake.

July 15th One of the mules strangled himself in the pasture last night by means of the rope which had been left attached to his neck, and another was found in sore distress from a similar reason. Upon discovering this loss, all hands were summoned to corral the animals and remove both ropes and head-stalls. Of course every one was seized with a wise thought at this time, and remarked that this should have been done at first. Some of the an-

1867 imals were very unruly and had to be lassoed King arrived late in the night and crept into bed with Gardner after exchanging greetings with all the party. They both kept up a grand chatter for several hours upon matters which did not concern me or this "o'er true tale". The musquitoes are infernal here, and Gardner has provided us with nets, which stretched over willow boughs, help to keep off the pests. The nights are cold. Washoe Peak (11.000 feet) on one side of the valley, is covered with snow. The Peavine Mts bound another side of the plain, and the Virginia Range still another. All look desolate except Washoe, upon which forests of pine may be seen. The other mountains however, have quite a growth of junipers upon them, and their depressions are full of wild oats. The deponent saith not what young Piute sowed them.

July 16th. Anthony and Clark started for the Big Bend of the Truckee, to overtake our escort of soldiers, who had been ordered to meet us at Pyramid Lake. By King's direction, I begun to collect plants, and found quite a number, but things didnt work smoothly owing to the chaotic condition of the baggage and the difficulty of finding any thing desired. A strong wind blowing which made it difficult to manage my dryers. We will not go to Pyramid Lake as originally intended, so King says to day, as the steam fire engines - or "Injuns" are frisky there. We will

1867. instead launch our wagons on the boundless sage brush and proceed immediately to Star City in Humboldt County. A lot of supplies have already been sent there for us. We amuse ourselves here by fishing and swimming. The water, however, is rather too cold.

July 17th King, Gardner, the Hagues and Emmons went out on the mountains exploring, and came back like the dove to Noah, not exactly with an olive branch, but with sprigs of juniper - typical of dry land. During their absence, about twelve o'clock, while I was standing in front of the hotel, our escort arrived*, led by a spruce young Serjeant named Martin. They were a rough set, not apparently regarding the regulations as to uniform particularly, as their pistols were stuck into the tops of their boots, and no two of them were attired precisely alike. Other rules regarding the conduct of "soldiers and gentlemen", were equally neglected. Some of them were so drunk they could barely stick on their horses. We told them where to camp and they proceeded to put up their tents and stretch a line for their horses. They have a train of pack mules under the charge of a Mexican named Antoine; also an army wagon driven by Steve Ballou, a Providence boy, as I afterwards learned. Upon King's arrival the Serjeant reported to him, and was invited to dine with us.

*a detail from the 8th Cavalry - Capt McElroy's Company.

July 18th Heavy frost in the morning. Frank returned, reporting the loss of two mules at Big Bend, which had broken their lariats the night before. Of course Clark and he naturally saw nothing of the escort. Several

1867 parties started in pursuit of the missing animals which Anthony claimed to have traced back as far as Truckee Meadows. I botanized most of the day, only stopping for lunch.

July 19th. Ridgway and I crossed the bridge, and entering the meadows, walked to where the Truckee leaves the plain and enters a defile of the mountains. The meadows afforded me a good opportunity to collect plants, while Ridgway "went after" ducks and other game. He thinks nothing of plunging into a puddle up to his middle after game which he has wounded, and has a risky way of leaving his arms lying on the bank till his return. It was very hot and I was glad when our walk was over. Staples started for Hunter's with a wagon and one soldier to protect the treasure he was to bring back. He was accompanied by Dick Cotter, who King told us was going to Donner Lake to recruit his health. We didn't learn till some time after that he had actually started for St Louis. He had been acting so strangely of late, and his mind was so evidently deranged, that King thought it best to send him home. There is a report today that the two lost mules have been recovered.

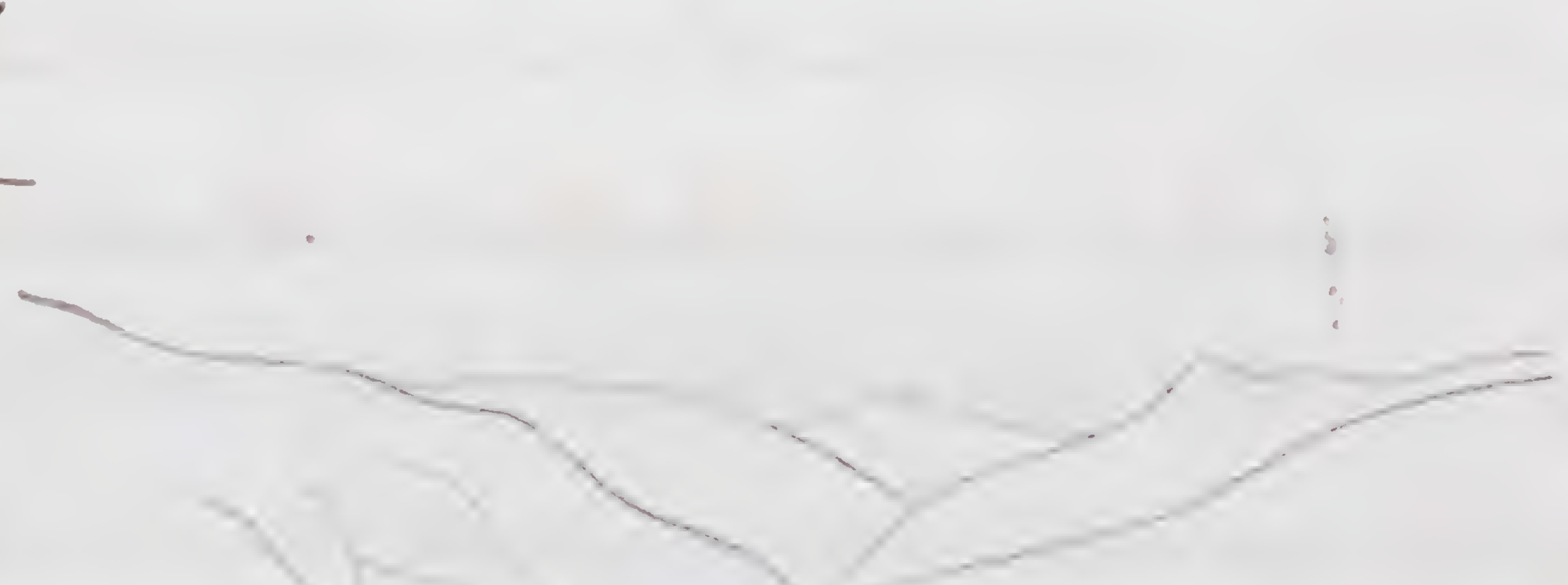
July 20th. Stayed in camp all day. Mr Sereno Watson who had followed us from the East and across the Sierra, walking from Cisco down, joined us to day as a volunteer. He will share the botanical work with me, and I have divided apparatus with him accordingly. I will tell what I know of him here, from what

1867 I afterwards learned.

He is a graduate of Yale College of the Class of 1847, and has been a school teacher, I think, at the South. He has an excellent physique which no amount of exposure seems to effect. He is an accomplished botanist, and a most indefatigable worker. For a long time, he had botany, topography and meteorological observations all on his hands. He is a Christian gentleman always, and I am proud of his friendship which has been most cordially tendered.

July 21st. Sunday Stayed about camp all day, botanizing in the meadows. Enjoyed a most royal old dinner. We had a little choral exercise in the morning. Afterwards some of us amused ourselves in fishing for minnows - to ornament the collection of the Zoologist. Began packing, in preparation for a start tomorrow.

July 22d. We made an early start in the morning. I enjoyed my ride very much. I rode with the escort a part of the time. I like the wild rattle of their accoutrements and the brigandlike appearance of the men. They are rough but picturesque. We encamped at Clark's station, where with several of the fellows I obtained a jolly dinner. The consequence of this extravagance, was that I was reduced to one "short bit" or silver ten cent piece, the only coin which I possessed for two months thereafter. We turned our animals into a pasture, and for that matter,



Exit of Truckee from Meadows.

1867 Camp 11. x ourselves also. We encamped quite near the river. Watson and I had a botanical hunt in which I found a Thelypodium of large size and an Asclepias. My companion discovered some water plants, among them, I believe Ranunculus aquatilis.

July 23d. We are now in the narrow defile by which the Truckee leaves the "Meadows". We entered this yesterday. There are fields and rich lands along the river still, but the mountains and the sage brush approach the water more nearly than above. The mountains look very barren, and show no trees except near their summits, where the Juniper (Juniperus occidentalis) appears. The bright and curiously colored strata of the mountains, are a strange feature in the scene, and at times a patch of pure white can be observed upon their sides. In one place I noticed colorations on the rocks, which seemed to indicate copper. Groups of cottonwoods ornament the river here and there, together with a thick growth of low willows and "buffalo berry" (Shepherdia argentea). This latter shrub is very ornamental, it's semi-transparent red berries contrasting beautifully with it's silvery leaves. These berries have a very agreeable taste, and are very attractive to birds. The cottonwoods above referred to, should be spared the axe, as in a country where there is so little arborescent growth, these trees appear really noble.

We crossed a novel ferry today. A huge scow nearly stretching across the stream, is attached to a rope passing at quite an elevation above the water. Guys descend from this to the scow which I believe, is moved by the

1867 force of the current. We payed toll here, but as a Government party should not have done so, and were ordered to reclaim it by the Engineer Department. We lunched just beyond the ferry. We left the Truckee at Ricket's station and made a long detour through the desert. Here O'Sullivan with whom I was riding, amused himself in cracking his revolver at jack ass rabbits, and came very near shooting himself. Our horses constantly started up myriads of lizzards who darted like lightning into the sage brush. We found some thirteen ~~our~~ or fourteen species of lizzard during the summer, including the queer little horned toads. We descended from the highlands to the Truckee again, at Cowle's Store or Big Bend. (Here, 1868, now stands the town of Wadsworth). At the time of our visit, there was but one house. It is here that the Central Pacific R. R leaves the Truckee and strikes across to the Humboldt. There was no rail road, however at this time. After refreshing ourselves with a glass of water, we continued on to find where King and Gardner had located the camp. and after a ride of several miles over and up and down sand hills, found it in a pretty spot near the Truckee. Groups of large cottonwoods ornamented the plateau, and there was an extensive growth of shrubs and herbage. Among the herbs the most conspicuous, was a species of sunflower, Helianthus growing in great abundance and now in full bloom. The soldiers were put to work, first to pitch our tents, and afterwards their own, as this was to be our head quarters for some time. The tents are arranged in a line and the cooks have bowers of willows for kitchens & dining rooms, Our

1867. mess was split into three at this camp, each with its own cook. We are quite near the ground where Col Ormsby and party were defeated in 1860. In the evening we were alarmed by the report that one of the soldiers had wounded himself by the accidental discharge of his revolver. King himself attended him, and was quite indignant at the non arrival of the hospital steward detailed for our detachment, who is now at Cowles, and who should have reported immediately.

Camp 12. July 24th

July 24th. Completely disabled from the effects of riding. The hospital steward arrived today and had a stormy interview with King. The wounded soldier seemed to get better for several days, and then grew worse, and finally had to be taken to Fort Churchill.

July 25th. The horses which were being herded by the soldiers, stampeded during the night, and many of them are scattered about the country, and parties in pursuit of them. Sergeant Martin and several men went to Fort Churchill. Still suffering much pain. O'Sullivan, Clark and myself occupy one tent, the floor of which we have covered with willow twigs. We all bathe in the river every day and enjoy it much. There are many rattle snakes about here and an occasional scorpion. We often kill the former as we go into the river. They seem to swim easily even against a strong current.

1867 July 26th. Worked all day. Ridgway had a serious nausea produced by finding a human skeleton in the bushes, where he was looking for vertebrates of lower type and more fashionably dressed. It has given him what the Irish significantly call, a "goneness". He found it in a sitting attitude. Sergeant Martin and men returned. O'Sullivan took several fine stereoscopic views. Many Piute Indians now hang about the camp, with the view of obtaining food. They represent themselves as "heap hogadie" (hungry.

July 27th. Feeling much better than yesterday. Botanized considerably during the day. There is quite a rich field for my work here. Two Indians lay down near me at night, and jabbered away, it seemed till morning.

July 28th. Sunday. We had a little sing in the morning, it being Sunday, and then all hands took to letter writing. Very hot all day, and windier in the evening.

July 29th. Had the neuralgia. It was very hot again. A party set out for an exploration in the direction of Rag Town, Custer in command. The party consisted of Emmons, Watson, Arnold Hague, Anthony teamster, and Marryatt cook. They also had several soldiers with them.

July 30th. King, Gardner, Clark, J. D. Hague and Sergeant Martin went into the mountains for the day. We all rose at 4 A.M. O'Sullivan tried to cross the river with his apparatus in order to take a view from the opposite side. He performed marvelous nautical feats in the attempt, while I laughed at him from the shore. He finally miscarried and had to give it up. The man from the store above (Cowles)

1867 came to visit us with two friends. There was an attempt at a thunder storm in the afternoon, but more wind than rain. I have seen no rain since I left Panama in May. The evaporation here is tremendous. One can saturate a handkerchief with water, flirt it in the air for a moment and it will be dry. Clark accidentally discharged his shot gun in the evening while cleaning it, and came near ending this diary at this premature date. I had but just sat down, when the shot passed over my head.

July 31st Walked over to the base of the mountains and a strangely wild walk it was. I first had to ascend the great high mud banks, some hundred feet in height, and curiously channeled by the rains of winter. I then found myself upon a sloping plateau reaching back to the mountains and covered with artemisia and linosiris of the most villainous kinds. I found several stunted herbs, among them a Dalea, which I gathered. The soil was sandy and covered with fragments of rock. Saw innumerable lizzards, and started up an occasional rabbit, who elevated his tail and "fled for the mountains" like the diminutive bee of sable hue in the Harvard College song. The plain was riven by deep ravines or cañons. Another curious thing was the trachytic rock, looking as if it had been intensely heated and then suddenly cooled off. Some of it was covered with tufa. O'Sullivan, Ridgway, Bayless, the Sergeant and I, were driven out by the combined and well directed efforts of the musquitoes, and moved our blankets at night, up

1867 on the high ground, but we did not fare very much better there. The nets afford us little protection.

Aug 1st Went out with O'Sullivan and Bayless upon the mud hills to see them photograph. Botanized in the valley.

Aug 2d. Went up the bank of the river botanizing, and found many plants for myself, among them an Hosackia, and some pretty green coleoptera for Ridgway, which were feeding on an Apocynum. Winnemuck, the Chief of the Piutes on the reservation, was in camp, but I did not see him. He commanded the Indians in the fight with Ormsby. The Serjeant and ten men, with Staples and his wagon, started for Fort Churchill. O'Sullivan and I spread our blankets in the tent tonight, as it looked like rain, but the musquitoes drove us to the hills in the middle of the night.

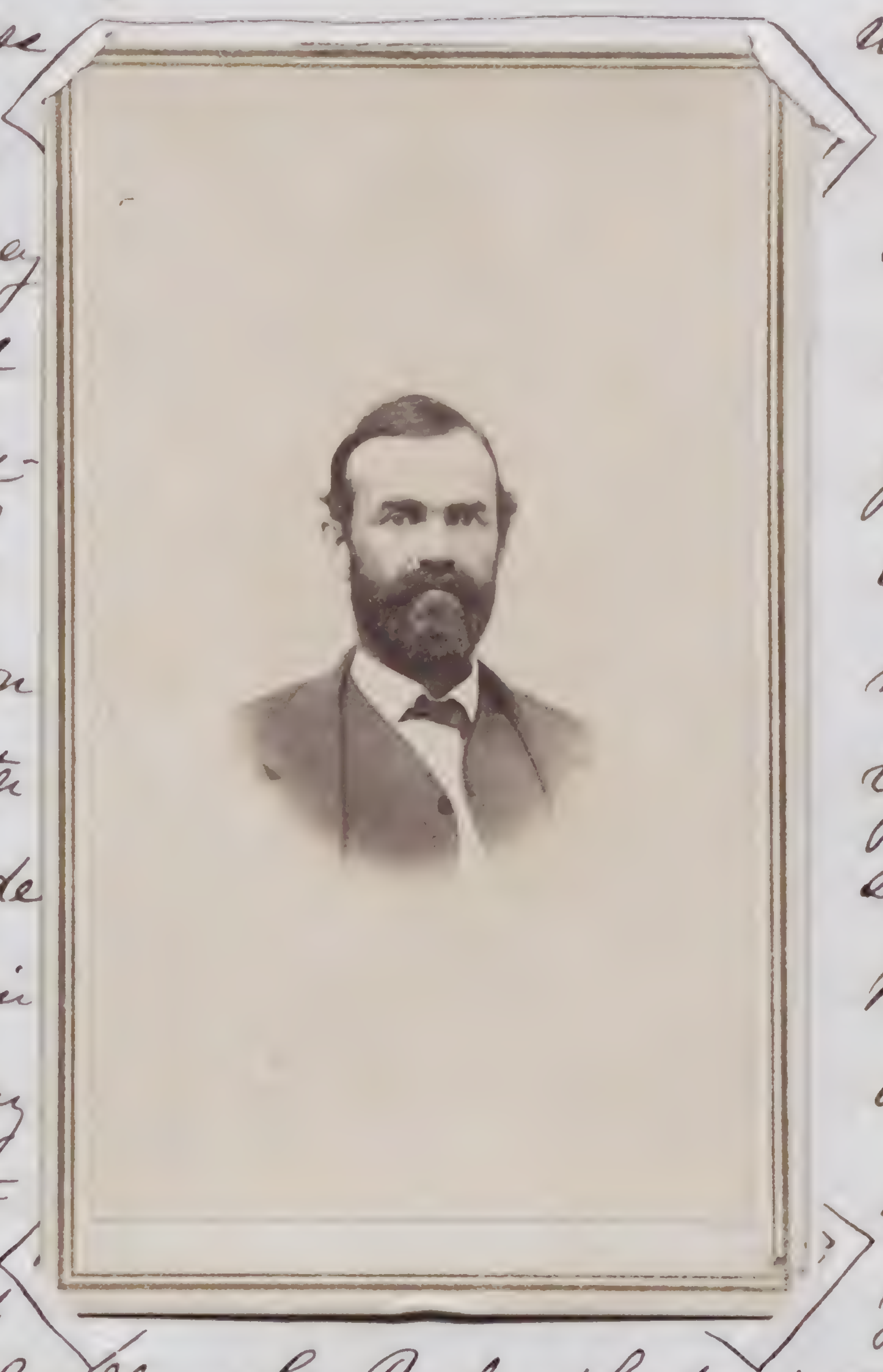
Aug 3d. Took a botanical stroll in the morning and visited O'Sullivan and Bayless where they were photographing on the mud hills. Ridgway who had gone down the river hunting, was thrown from his little mule "Bunny", and being obliged to walk several miles to camp, indulged, I fear, in some youthful attempts at swearing. Lew was sent for to return to camp and catch the "beastie". Our friend H. G. Parker Esqr, Superintendent of Indian Affairs, arrived, to spend a week or so with us. He brought the mail but there were only two Boston papers, and no letters for me. I have had no news from home since I started, except a few words from Prof Brewer.

Aug 4th Sunday. By King's permission, I wrote my first letter to the Providence Journal.

1867 Aug 5th Rode with Parker and James Hague across the sage brush about four miles to a mountain range lying south west of the camp. We forded the Truckee going and returning and found it no easy job, as we had in the first place to cut away the willows in order to reach the water, and then owing to the current were unable to go directly across, but had to follow the shoals diagonally. My mare did not fancy the water at all, yet bore me bravely up, stopping once or twice for a drink.

Upon reaching the mountain, we rode as far up a cañon as possible and tied our horses to a large juniper. Here James Hague left us, in order to geologize a bright colored cliff we had noticed as we approached across the plateau. A stream descends the cañon at some time of the year, as the willows indicate. I found large quantities of a species of Cleome here, in fruit and flower. Leaving our animals to graze on the very scanty herbage. Parker and I followed up the windings of the stream, which soon begun to be walled in with steep rocky cliffs-and to be obstructed with falls. The scenery became wild in the extreme. Parker is an active climber and assisted me greatly in the ascent. The verdancy of the grasses and cyperaceae, together with the occasional appearance of a dove, indicated surely the presence of ~~when~~ water somewhere near at hand. Finally, after a tedious scramble, we found it in a very gentle stream, and dug a pool for it's reception. The view from here out upon the desert was very fine. After picking up some plants, and catching a lizard or so, in which

1867. accomplishment, Parker showed himself very expert, we descended and took a nap under the juniper until Hague's return. On our way back over the sage-brush, we saw great numbers of jackass rabbits, and Parker made several ineffectual attempts to shoot them, but his horse was too restive to allow him a steady shot. It was getting dark when we returned to camp. O'Sullivan and Bayless went to Glendale after a boat, which Parker obtained for the use of the Survey on Pyramid Lake.



Hubbard G. Parker, Superintendent of Indian Affairs for Nevada.

Aug 6th. Quite sick all day; the first attack of fever and ague. Had a chill in the evening. I think this disease has really been upon me for some weeks, as I have felt utterly weary, indisposed to move, and despondent. The musquitoes were simply infernal all night. Parker, Ridgway and J. D. Hague, returned today to the same mountain cañon, I visited yesterday. As Hague spoke a good deal of "breccia" while there, Parker who has a western genius for corrupting names, has christened the cañon "Berkshire" by which name it is entered in our note books.

Aug 7th. Ridgway returned for provisions for his party in Berkshire Cañon. He reports them encamped near where Parker and I found water. They had great difficulty in getting their animals up the mountain. I have been ill all day

1867 with severe head ache and pains in the back and limbs. Staples returned from Fort Churchill.

Aug 8th King and Ridgway started with provisions for the Berkshire party. Gardner, Clark and Staples went up to Cowles to spend a few days taking observations for the initial point of the Survey. Owing to the obscuration of the sky by clouds, rendering their work impossible, they were obliged to return. Still sick and dizzy. O'Sullivan came in, reporting the wreck of the boat on a sunken rock in the Truckee near Clark's station. The loss of property amounts to $40.00. No insurance. "Here and there appear floating on the great deep" the apparel of men, and spars and great riches. T. H's revolver sunk in a watery grave, and the Piute nation may steal in peace. Checked suddenly in its joyful course, the bark upset, and the noble oarsmen were ignominiously spilled into the stream. O'Sullivan paddled for the shore first, and called to Lew to throw him his vest containing his watch and money. The rush of the rapids deafened Lew, so that he did not understand about the garments containing valuables, and threw it with such force, that the watch was smashed and the money rolled around loosely in the sand. Lew walked to Clark's for help, while O'Sullivan in his wet clothes remained by the ship. Lew after awhile ~~he~~ rejoined him and they passed a cold and wretched night. O'Sullivan was a most demoralized looking man when he came into camp. He doesn't think

1867 much of the advantages the Truckee offers for navigation.

Aug 9th Gardner set out with nearly all the escort to rescue the wrecked boat. Clark, Longhurst and myself were the only ones left in camp. King, Hague, Parker and Ridgway returned from Berkshire cañon. There was a thunder storm in the afternoon but not much rain. I felt better than I did yesterday.

Aug 10th Gardner and party returned from the scene of the late disaster. O'Sullivan, Bayless and a soldier named Mitchell arrived in the boat, and were received with due honors. A sergeant from Fort Churchill dined with us. I forgot to mention before that Sergeant Martin always does so - as King's guest. King, Parker and J. D. Hague rode down to Winnemucka Lake, a smaller sheet of water near Pyramid Lake. The Truckee river divides and supplies both these lakes, and while the water in Pyramid is said to be diminishing, that in Winnemucka is increasing. Pyramid Lake was discovered by Fremont who named it from the shape of one of it's rocky islets. There are many islands in it, all of them frequented by gulls, pelicans and other sea birds, and at some seasons, thickly strewn with eggs. Some of them are covered with a very curious tufa formation. The land at the mouth of the river is very rich and is thickly wooded with cottonwoods. The fresh water of the river is soon deteriorated by admixture with that of the lake, which like all similar sheets which have no outlet, is saline

1867 and unpleasant to the taste.

The Truckee after flowing in a general easterly direction for about thirty miles, suddenly bends, and following a northeast course, finally empties into Pyramid Lake. This beautiful sheet of water is about twenty five miles in length and ten or twelve in width at the widest part. The Piutes hold as a reservation, a belt of land surrounding it. The lands removed from the water are of little value, on account of the near approach of the rugged and sterile mountains.

Winnemucka Lake is rarely found on any but the most recent maps, and we are led to wonder how it could have been overlooked. It is possible that it has been formed of late. It is separated from Pyramid by a narrow belt of high lands and mountain ridges.

Where the stream which branches off from the Truckee, enters Winnemucka Lake, there is a very large deposit of infusorial earth, forming a bluff nearly forty feet in perpendicular height. The stream is thirty feet wide at this point and very deep. The width of the deposit is about one hundred feet. Calcareous tufa prevails throughout the neighboring region, under which is a volcanic basalt. The whole deposit is very free from impurity. The stream is rapid and has worn off great blocks of this chalk like substance which may be seen lying in its bed. There is a path near the

1867. edge of the water where one can cut off huge blocks a foot square, which it is said will float on the stream (?) The opposite shore is of the same height, and consists of a barren bank of drifted sand. The infusorial deposit appears to have a hard casing of the same material, hardened like clay stone, in which are impressions of roots, between the laminae, which are of various beautiful colors. The above information is derived from Mr Parker. I never myself visited either lake.

I slept on the hill at night. Felt much better today.

Aug 11th Sunday. Read, wrote letters, and kept quiet all day. I used to take my writing materials and a folding chair, and sit under one of the large cottonwoods at a distance from camp. The soldiers as they relieved each other in herding the stock, were the only interruption. There was a thunder storm in the afternoon.

Aug 12th. Custer and his party returned. They had a hard time on the desert, with a lack of wood and water. Parker, Ridgway and O'Sullivan started for Pyramid Lake, amidst the shouts of the bystanders, and peals of ordnance (mostly of small calibre). They go down by water. (I heard afterwards that they had a terrible time reaching their destination, grounding on shoals, being drenched with rain &c.) A rash broke out today all over my body. It is very irritating and painful. Another thunder storm in the afternoon.

Aug 14th. Engaged all day in boiling down alkali water

1867 for Arnold Hague who wished to obtain a rough estimate of the mineral residue. I had barely boiled it five minutes when a solid crust formed over the top, a sad prospect for us, when we are informed that this is the water we will soon have to drink. Begun a letter to Lode. Hague and Emmons rode to Pyramid Lake.

I must relate a funny incident which was afterwards told me by the lake party. Parker and the rest left Ridgway one day on the island where they had been camping, and were absent all day. When they returned in the evening, they found the boy, fearful of Indian attacks, had strapped on to his person all the revolvers he could find and was armed moreover with several rifles and shot guns. He was a perfect walking arsenal.

Aug 15th. Took a botanical walk about two miles up the river, and found several species of plants which had escaped me before. Had a quiet smoke, seated on a cottonwood tree which had fallen, and beneath the shade of another. Tried to make a cut off on the way back, to save time, but became involved in the acequias or irrigating canals, and was longer reaching camp than if I had followed the regular road. The old fallen tree referred to above, was a favorite resort of mine, while at Camp 12.

Aug 16th. King went to Virginia City, and Sergeant Martin and Frank Anthony to Fort Churchill. I walk-

1867 ed down to Newman's ranch, two miles below us on the river. Had a most palatable lunch there - and delicious milk. Gathered several new plants, and then drove ~~rode~~ back to camp with Newman in an extempore buggy of his own manufacture. It rivaled the "one hoss shay" in construction and appointments. Into this shaky contrivance we had a span of horses harnessed, and drove up to camp at great speed, putting to shame the vaunted dangers of railway travel. Newman pointed out the place where Truckee John, a well known Piute, was murdered by a white man a short time since. His companions fled when they heard the report and saw him fall.

Aug 17th Botanized on the island in the river near the soldiers' camp, in the morning. This island is merely a long shoal, probably covered at times of freshet, and now strewn with drift wood and debris. A few shrubs maintain a perilous existence in it's sands. A teucrium, herpestis and other plants occur on it, which I think probable have been borne from the head waters of the river. Went up the mountain to the east of the camp, on which no green thing is visible, nor did I see a drop of water. Nothing but blackened volcanic rocks, sand and sage brush could be seen. I hardly found a plant to repay me for the trouble of the walk. Gardner, Clark, and Watson returned, and the lake party with the exception of Parker. He intends stay-

1867 ing with Nugent, the Indian agent to night at his house near the lake.

Aug 18th. Parker returned in company with Nugent. I had a return of the chills in the evening. A very unquiet night.

Aug 19th. Intermittent day. Feeling much better than yesterday, but still with a disagreeable buzzing in the head, probably the effect of the quinine I have taken. Lay still most of the day, reading. Parker left for Virginia City.

Aug 20th. Gardner, Clark, Custer, J.D. Hague, Marryatt, the Sergeant and ten men with pack mules started for Winnemucka Lake. They expect to be away some sixteen days, and crossing the Trinity range, will rejoin us at Oreana on the Humboldt. I had a return of fever and ague in the evening, together with head ache. We struck our tents, and got ready to move tomorrow. Corporal John woke us up in the night with a story that some of the escort intended to desert (which they did) and run off our stock (which we prevented them from doing) Emmons, who has charge of the party got up and he and Lew watched the animals most of the night. It is pretty hard when a party has to guard itself against it's own escort, but it is generally the case where there is no commissioned officer in charge of the men.

Aug 21st. We all rose early, finished packing and march-

1867 ed fifteen miles on the Humboldt road, through the meanest of deserts. Ridgway was seized with fever on the way - and had to dismount and get into one of the wagons. His little black mule trotted along with the empty saddle. Emmons, Hague and myself took a short cut over the mountains, heading off the wagons. The way was covered with loose stones, affording difficult footing for the animals. Saw much of a species of conifer, Effedra antisyphylitica. We passed Coffman's station, where we rested for some time, and encamped near a toll house, on a rocky hill side. Why there should be a toll house here, where there is barely any road, and any team is at liberty to deviate from what there is, I confess puzzled me more than a little. The keeper was once a well to do druggist in San Francisco, but has been ruined by drink. He is a comical case. He pointed out a high peak to us, and told us it was the veritable one upon which the devil took the Lord. "He showed him the kingdoms of the earth and Humboldt County, and told him he might have all if he would but worship him, But the Lord didn't see it?" "Desolation" he added "thy name is Humboldt; Boys you are in it now." We soon learned to agree with him fully.

Aug 22 Rode some twenty two miles. Passed the hot springs which we stopped to examine. There are a number of wells of varying temperature, some standing as high as 200°. The water is beautifully clear, but saline and is

1861 in constant ebullition. The Springs are surrounded by a green but coarse and wiry species of grass. In a shaft that had been pierced for some purpose, near by, I obtained specimens of infusorial earth, which my brother afterwards reported to be all of fresh water origin. There is not a trace of that originally pure liquid here now, however. All the water is brackish. In similar thermal springs in the Black Rock country, some of the party afterwards found living fish, living in hot water! at 70° and in a state of organized chowder! If oysters occurred on these desert plains in the same way, the travellers happiness would be much enhanced. An ever-ready stew would be prepared for all comers, cooked by the gnomes at their volcanic fires and served up hot and already salted. At present this salt water runs to waste - in little streams trickling through the wiry grass. - And the oysters where are they? Certainly very far from this benighted spot. O'Sullivan met with an accident today. He was thrown from his horse, and fell upon his hand, which he cut severely. Emmons turned faint at the sight of the wound, and when I came up, I found them both lying on the ground. I too, was ill with an approaching fever, and suffered such pain in my limbs that I was obliged to dismount and walk.

Upon recovering somewhat, "T.H." and Emmons "loped" on, and I plodded into camp the best way I could, leading my mare. I was amused today at lunch

1867 to see Emmons attempt to find shade by sitting under a telegraph pole, whose narrow shadow crossed him like that of +gnomon an indicator+ on a dial. What were the wires saying I wonder as the wind played across them in weird music?

We camped at Sami Station, a most God forsaken place, where we took refuge in a corral with — the other animals. Bah! how nasty it was! The hay was wretched and the water worse, being villainously salt. It couldn't be tolerated "straight" and spoiled our tea and coffee when we tried to disguise its taste with these herbs. Conceive of a mixture of cooking soda, magnesian salts, sulphide of ammonium, and common salt together in one liquid, topped off with the drainings of a barnyard, and you will have some faint conception of what we had to drink here and afterwards. It is an insult to one of Heavens most precious gifts - to call this stuff water. However, we had to worry it down in the absence of any thing better. Fortunately we had brought a small quantity of good water with us from the Truckee.

Ridgway and I both suffered severely all night from fever and ague. I camped outside of the corral in the sage brush, and away from the fellows. O'Sullivan was very kind in bringing me any thing I desired.

I cannot close the account of this days journey, without dwelling for a few moments upon the first view of the Humboldt which is obtained soon after passing the hot springs. A broad, barren valley is stretched out before us through which the course of the river is indicated by the

1867 fringe of green tules which border it. Occasionally the plain is marked by a tract of white alkali looking like a snow field as it glistens in the sunlight. The mountains which border the valley are fantastic in outline. A soft mist envelopes them ~~mountains~~ and seems to preclude all inquiry into the features of the anomalous landscape. There is no live color in the scene. Even the greens, with which nature generally relieves her rugged outlines, are here wanting, and yet there is a strangely fascinating and weird beauty in the view, peculiar to the desert. Here the "Humboldt which begun it's course far away as a fair young stream, expands into a lake, and becoming disgusted with it's vitiated life, commits suicide by disappearing in the sands. The spot is hence called the "Sink of the Humboldt". At the sink proper the water is intensely alkaline and disgusting to the taste, and the atmosphere of the region is filled with noxious vapors and miasma. It would be doing injustice, well deserved however, if I failed to mention the chief inhabitants of this region - the musquitos. For countless numbers, persistency and venom, they are unequalled by any of their species. What are these little torments doing so far above the sea? Really I cannot say but "suppose the selfsame power that brought me there brought" them, and sincerely regret that the potent spirit should have produced us ~~brought us there~~ simultaneously.

If any artist desires to make studies of the Valley

1867 of the Shadow of Death, here is the place for him to come, provided he can gaze and yet survive.

The Carson river also disappears in the same basin, and indeed this is a characteristic of all the streams of ~~the basin~~ of Nevada none of which have any connection with the sea.

"The wildest glen but this can ~~show~~
Some touch of nature's genial glow;
+ + + + + +
But here, above, around, below,
On mountain, or in glen
Nor tree, nor plant, nor shrub nor flower,
Nor aught of vegetative power,
The wearied eye may ken;
But all it's rocks at random thrown
Black waves, bare crags, and banks of stone".

Aug 23d. Rode some six miles to the slough leading to the sink of the Humboldt. This name "sink" is applicable not only on account of the sudden disappearance of the waters, but also owing to it's fetid condition before it "peters". A strange feature in the landscape today, was formed by the fleshy and succulent desert plants, which often surmounted a mound of sand five or six feet in height. These elevations rising above the general surface, dotted the plain in every direction. Whether the phenomenon is attributable to the occasional rains of winter, or the violent winds of summer, I cannot tell. It would appear as if the plants marked the original level of the plateau, and that the ~~eth~~ earth around

1867 had been eroded where it was not bound by the interlacing roots of the plants. In early spring, the deserts are said to bloom with many brilliant flowers, but the more delicate plants had long ago yielded to the sand bearing winds, and none but the coarser species remained.

We waited some hours for Emmons to find a more eligible spot for a camp. In the mean time, I took a bath in the slough. Ridgway lay very ill all this time, under one of the wagons. While we were waiting, King arrived per stage, and brought the mail. Alas! there was nothing for me. Soon after we rode to the selected camp some miles above, at the dam of the Humboldt Lake.

Here there is a quartz mill and several houses. We had great difficulty in finding wood, but finally managed to scrape together enough to cook a supper. I fear our animals did not fare so well, as there was nothing but salt grass for them to feed on. We all suffered the tortures of the inferno during the night from musquitoes, which out-Heroded any innocent slayers I have ever met with.

The Humboldt was originally called Mary's river, and was rechristened under it's present name by Fremont, who seems to have been a devout worshipper of the renowned traveler, as he has named after him countless mountains, lakes, and rivers, to the confusion of geographers.

Aug 24th King, Arnold Hague, Emmons and Watson, were in the mountains to the east of us all day, where, I believe there are some mines which help to supply the quartz mill

1867. with ore. Some also comes from what are known appropriately as the Desert Mines

I botanized a little, securing a curious eriogonum, and a potamogeton. I also fished in the slough for some time with tolerable success. The fish however, were soft and poor eating. Had an awful attack of fever in the afternoon, and another wretched night of musquitoes and wakefulness. The insects swarmed here in such numbers that they actually extinguished our candles. We all slept in our clothes and boots, and had nets over our heads, but even with these precautions, were obliged to get up and walk about, in self defence. Some of the men wrapped themselves up in the tent cloths, preferring the chance of departing like Desdemona, to being eaten alive. Others took two +aparejos and made a sort of hut of them. All smoked, but to no purpose. At the same time the stench from the neighboring lake, was horrible. Many of the fellows were up all night.

+Mexican pack saddles

I took tea with Dr one of the proprietors of the mill. He has been very kind to us as has also a Mr Buckner who lives here.

Aug: 25th. Tried to sleep all the morning and was partially successful. Slept or tried to, at night by a smudge fire, with Ridgway and several operatives of the mill. The fire was made of dry cattle manure, and the smoke from it was about as bad as the disease it was meant to cure. The wind blew this smoke across us as we slept, but whenever the fire died down, the insects were at us again. On the whole I passed a pretty tolerable night considering the circum-

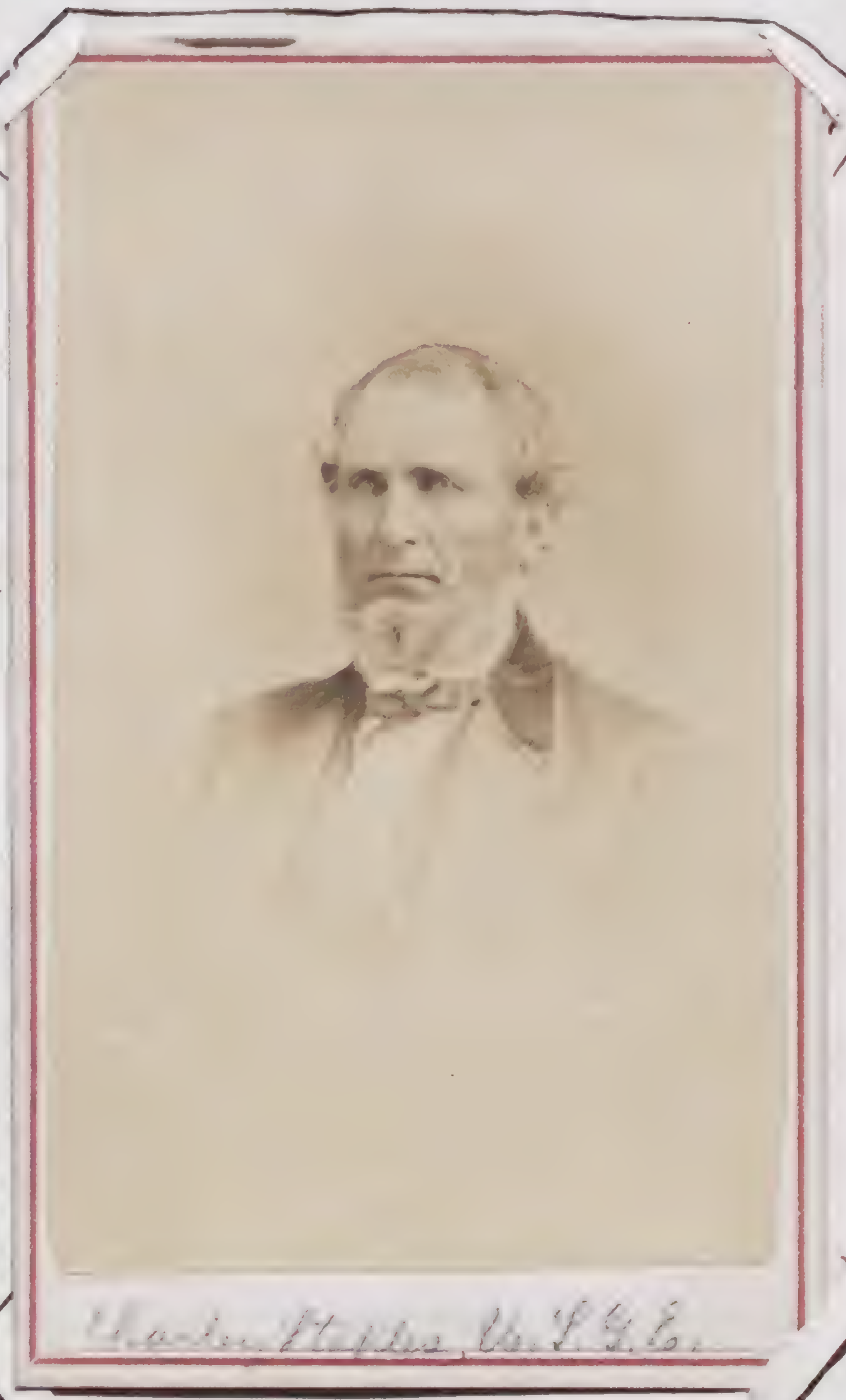
1867. stances. The water here is insipid or saline - There is something wrong about it.

Aug 26th. A most terrible attack of fever and ague. My suffering was worse than any bodily torture I ever remember to have experienced. I lay where I happened to fall, and felt deserted by God and man. I lost faith in every thing. The attack left me very feeble. The "Doctor" before mentioned, brought me some raspberry vinegar to drink, which draught I hope Heaven will reward him for. A very hot, and misty day. Various parties went out exploring.

Aug 27th King and Emmons started for the Hot Spring Range to pass a few days. They took Charley Staples wagon with them. I lay quiet all day, weak but free from pain.

Aug 28th. Started off again early in the morning in a rain storm. All were rejoiced to leave the hole where we had been for the last few days. I was weak and miserable and unable to eat. It rained violently in the afternoon, my chill came on, and I suffered terribly. I rode on one of the wagons with Frank Anthony and Ridgway. The latter was ill also. There was barely room for three of us, and Ridgway in consequence crawled back amongst the baggage. I covered my knees as well as I could, but got wet nevertheless. We stopped for the night at a little wretched station, called Parkers. It is said to be the "meanest place between Missouri and hell". Here I was carried into the shanty, and my blankets spread for me on the floor. A violent fever set in, which broke up about 8 o'clock.

1867 I had a raging thirst. Charley Staples made me some beef tea out of "beef stock" canned for the medical department. It greatly nourished and refreshed me. I took quinine in small doses throughout the day. The cabin was a small one–occupied by two brothers, young boys, who had evidently tried their wings while yet in the down. My rest was disturbed all night from various causes. In the first place, a lot of soldiers in the next room kept up a loud conversation in ~~the next room~~, denying that there was any such thing as love between the sexes. A man who talks any such gammon disgusts me when I am well: now I felt like popping at them all with my six shooter. After they had retired and I supposed I would be able to obtain a little rest, I was kept awake by two soldiers baking bread in the same room with me. They stayed till a late hour. Then the Idaho stage arrived. and there was another row. "I would not pass another such a night" for something pretty and with money.



Charles Staples U.S.G.E.

Aug 29th Felt much more comfortable, but weak. ~~Drove~~ Rode on the wagon with Frank Anthony and chewed quinine. We passed through a rather richer tract of sage brush land today, and met with a few willows. Stopped to water at Lovelock's

1867 station where there is quite a tavern. Passed through the village of Creana and camped just beyond on the low land near the Humboldt. Slept on the high bluffs with O'Sullivan to avoid the dampness of the valley. We

Camp 17. had hard work carrying up our blankets a half mile from camp. Cold and free from musquitoes. We had enjoyed at supper the first fresh beef we have eaten since entering Nevada. and did our "level best" in disposing of it.

Aug: 30th Too weak to get about much. Stampede of the animals in the night, oweing to the infernal yells of the coyotes. When I woke up this morning, I found one of these howling cowards looking at me. He soon left when he saw I was awake. I slept on the high bluff again.

Aug: 31st Moved my blankets down from the bluff, oweing to its' great distance from camp, and the fear I had that my things would be stolen. I have no doubt now, that they might have remained there for a month in perfect security, stil I did not choose to risk the chance of possible loss. The animals which stampeded yesterday, were brought in in good order. King and Emmons returned, bringing J. D. Hague, who oweing to an attack of fever, was compelled to leave Gardner's party. I felt very much better today than for a long time back but remained quiet and stupid all day. Among the plants I found at this camp was a Phelipaea which the Piutes told us they used they used as food in October. The root is the part employed. They also use the roots of the tules.

1867. Sunday Sep 1st. Driven from my bed early in the morning by a sprinkle of rain, which threatened at one time to be a serious storm. Gardner and Custer arrived ahead of their party, both unwell, and the latter actually ill with fever. Wrote my second letter to the Providence Journal. Slept in my tent at night, in which we also stowed Custer. He was very sick and slightly delirious.

Sept 2d. Clark, with Sergeant Martin and the soldiers, and Jim Marryatt arrived. The latter was a great acquisition, as Staples was quite ill, and Longhurst too sick to work. Staples has been down with fever for some time, but has kept about bravely. I wrote up my botanical notes in the morning, long left in statu quo from illness.

September 3d. King thought it wise, owing to the prevalent sickness in the party, to remove the camp to the mountains, and Gardner preceded us in order to find an eligible spot. He soon returned, saying he had ~~found~~ discovered a very fine place, with wood, water and grass, about eight miles off in the West Humboldt Mountains. The teams were then loaded, horses saddled, and after a rough ride over a gradually ascending trail, we reached Wrights cañon and encamped. It was indeed a pretty spot, in a wild ravine, through which sparkled a stream of pure water, fringed with luxuriant shrubbery. Among the shrubs, were willows, cornels, alders, buffaloberry &c. and a clematis now in fruit twined over all. Asters and golden-rods were in bloom along the stream, and reminded me of our autumn woods at home. The grand old mountains towered above us to about

1867 8000 feet. Star Peak in this range is 9.960 feet in altitude. Thinking it best that the sick should have all
Camp 18 the benefit of the mountain air, they were sent by Mr King, a mile or so up the cañon. Received my first batch of letters from the East, and felt as happy as a prince. I should mention that our stock were driven up the cañon, where they could graze on the rather limited supply of bunch grass. We noticed a curious phenomenon here, which frightened us all at first. We perceived at noon that the stream which had been quite full, became perfectly dry, and we thought our supply of water was cut off for good. At night, however, it ran joyously again, and the same thing was repeated every day. This is the result of the tremendous diurnal evaporation which exhausts the water before it can reach the valley. Radiation from the surface of the mts into the clear sky at night, restores the stream to it's natural state. The same thing was repeated every day.

Sept 4th. This is Commencement Day at Old Brown and 64 has gathered to her triennial meeting, and to rechristen that remarkable specimen of an elm, which we entitled a class tree.

Visited the upper or invalid camp with O'Sullivan. We found Longhurst and Custer quite sick and the others convalescent. Custer with his usual eye to comfort, had encamped quite apart from the others, under a lofty rock. The same stream which intermittently supplies the camp below with delicious water, is here permanent. This

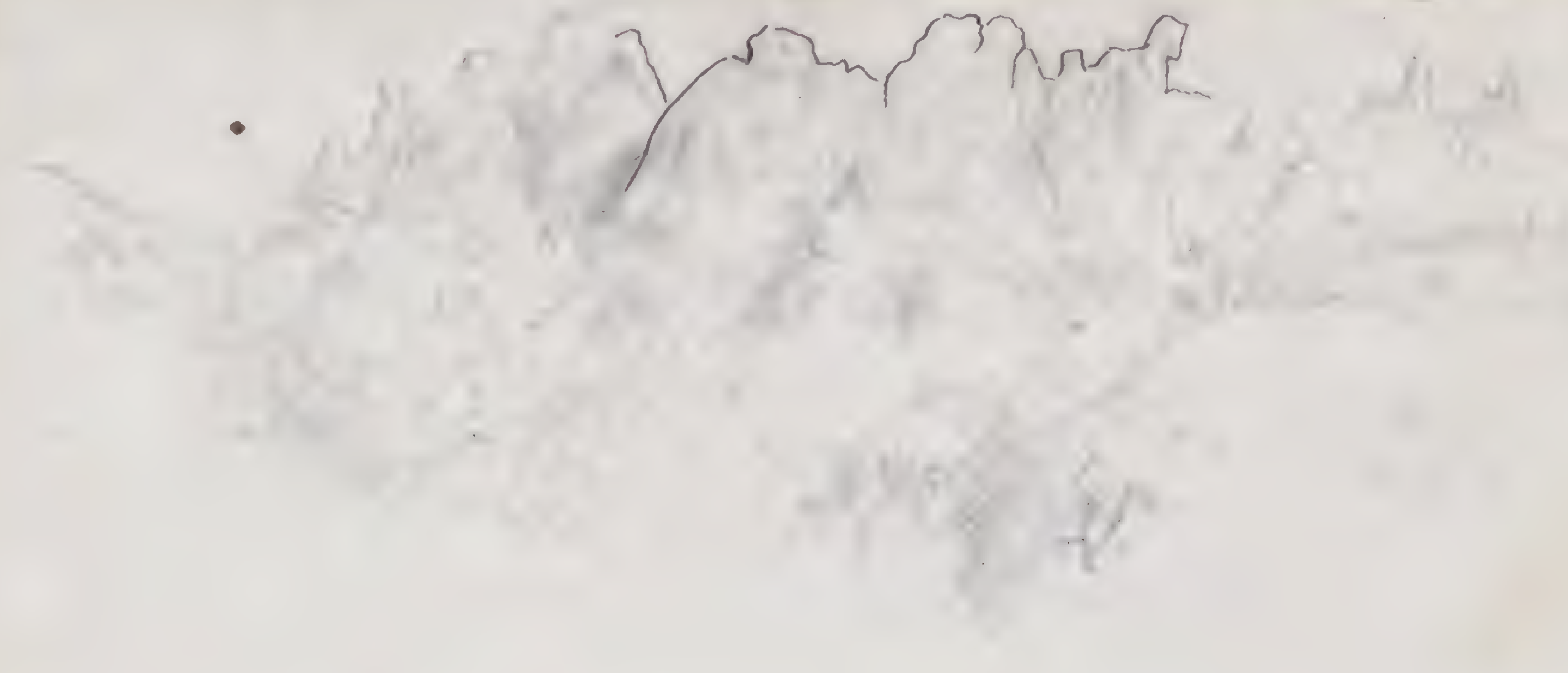
1867 upper camp is in a most romantic spot, with the bold summits of the mountains rising all about it. Quite a good road leads to it from the main camp, passable on horseback. The trail continues over the range to Unionville. A series of bold and castellated ridges of granite, attracted the attention of O'Sullivan and myself, and we determined to climb them. My companion wished to see if it were possible to get a camera to them. The worst part of our climb, was up a steep sage brush hill which led to the base of the rocks. We found the granite wall very fantastic in outline, bold and steep, and with all kinds of curious caves and crannies in it. The weather had acted on the rock in a most peculiar way. The surface of the cliffs in some places, looked as if the granite had once been liquid, a breeze had blown gently over it, and the plastic material had suddenly been petrified. The cause however is quite different. It is doubtless owing to certain portions of the rock having a more durable composition than ~~others~~ the rest, which are eroded, leaving the harder parts in relief. Quite large junipers grew among these rocks, and offered a refreshing shade. I found here the little alpine potentilla or Ivesia Newberryi. The wind "blew great guns up there on the top", and coming to one dangerous looking place, I told T. H. I wouldnt go any further, not being able to trust my head, which becomes dizzy in such positions. I told him I would await his return, and employ the interim in gathering flowers. He reported the view from the top very extensive and it certainly was grand from where I beheld it. We desired

1867 to go down by another way, but found it not altogether practicable, and so returned down the deep ravine in front of the great cliffs. We had a pretty rough scramble, but on the whole, enjoyed it. My heavy, loaded revolver and cumbrous portfolio rather interfered with my comfort. In the ravine or branch cañon we descended, we found many little wild cherry bushes loaded with fruit. The jaunt repayed me in its ~~in~~ interesting botany.

Sep 5th "Climbed the trackless mountain all alone". Passed up by the margin of the stream, that I might do full justice to it's botany. Found aquilegia formosa, epilobium angustifolium and two other species of the same genus, besides cornels, alders, willows, asters, golden rods clematis, and many other plants. Stopped at the upper camp, after making quite a detour to avoid a rattle snake, whose warning I heard in the bushes. Charley Staples gave me some very nice pea soup. Found the fellows in various stages of sickness or convalescence. Leaving them I continued my journey up the mountain, having a rough scramble and a grand view to repay me for it. I climbed some trachytic cliffs in the right hand branch of the cañon, and shouted to Charley Staples when seated on a ticklish pinnacle. The descent was the most difficult as I was obliged to jump from one rough stone to another, at the risk of setting the whole loose mass in motion. These rocks were a great pile of debris from the cliffs.

1867 Gardner was unwell today. A load of hay arrived for our animals from Oreana. The Sergeants horse was sick, and was relieved by Mr King, who bled him in the ~~nose~~ mouth.

Sep 6th. Feeling rather fatigued from the effects of my ramble yesterday and day before. I stayed about camp, writing and taking things easy. Reports from the upper camp in regard to the health of the men, not so favorable.



Granite Ridge West Humboldt Range 7000 ft
Sep 9th 1867.

Sep 7th I started off immediately after breakfast and followed up the ridge on the left of the cañon. I enjoyed the extreme solitude of the walk, allthough it required arduous exertions. × I climbed the first ridge of the granite peaks, having first sketched a view of them. Ensconcing myself in a snug and shady nook, I enjoyed my lunch and a pipe, fanned by delicious breezes. The whole scenery of these strange rocks was fascinating to me and the view from them down upon the desert, most magnificent and awful. I was seated upon the edge of a frightful abyss, and looked it seemed a thousand feet into a small valley. Then the main mass of the mountain rolled down towards the plain in great

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1867. brown waves, without a tree or any green thing upon them, unless maybe a straggling juniper.
They were covered with sage or artemisia but even that is of an ashy color. In fact the desert plants are marked by an absence of chlorophyll The great valley of the Humboldt stretching to the river and beyond, was equally barren. Then rose the Trinity mountains, and then other ranges, until a white cap here and there in the dim distance, indicated the line of the Sierra Nevada. There is no live color in the scene, and yet it does not lack for beauty. The soft shades of neutral tint and azure, and at evening the peculiar golden dust thrown over the mountains, are effects that are unique and unsurpassed any where. I did not find many plants today. Reports from the hospital continue bad.

Emmons and Bayless returned from Unionville without our stores, which it was expected they would find there. We were particularly anxious to obtain some good tea, the Japanese stuff that we are using, being little better than sage brush.

Sept 8th. Very bad reports from the upper camp concerning Longhurst. He is said to be very ill indeed. I slept most of the day, as I felt rather unwell and a tendency to headache.

Sep 9th. Quite sick, though without fever. Lay quiet in camp. Custer came down from the upper camp but still

1867 looked very unwell.

Sep: 10th Feeling better but stayed about camp all day. The Hagues, Emmons, Clark and two soldiers, with the "through trace" went over towards Unionville. Wrote a long letter. A man named Hawes was up from the Truckee, to try and get money out of King for camping the party on his ground at Camp 12. His place had never been fenced in, and hence King refuses to pay. He seems a meek sort of fellow, but has been very persistent in his attempts to secure payment for what he considers an unwarrantable intrusion upon his ground. (He afterwards put the matter into the hands of a lawyer at Unionville, but I believe the whole thing fell through). He stayed in camp all night.

Sep 11th Remained in camp all day, owing to my sickness, which still continued. Watson returned from Unionville, rigged out in new clothes, and looking much less ragged and like a brigand than he did before. I begun to read "At Odds" by the author of "Quits" and "Initials". The sick up the canon are reported better.

Sep 12th Still unwell. Remained quiet, and finished "At Odds".

Sep 13th Quite sick. Lay in bed all day, or rather on a pile of blankets which I pulled behind my tent out of the sunshine. Watson has made an extempore table in this tent, where he works and where I do when I am able. He also keeps a record of the weather, the amount of evaporation &c. Longhurst was brought down from the upper camp on a stretcher in the afternoon. King, O'Sullivan and some of the soldiers

1867 carrying him. He is an awfully sick looking man. His fever has taken a typhus turn. We haven't even a hospital steward with us now, as King sent in the man we had with a recommendation that he be dismissed, owing to his getting drunk and selling his medicines. I had a bad night.

Sep 14th Broke up camp at Wright's cañon, King thinking it necessary to move the party, where if possible we could obtain medical treatment. As I was quite weak I had to ride in the "thorough brace" with Charley Staples. I was quite comfortable until a violent rain storm and heavy gale set in, wetting my knees and chilling me to the bone. In order to reach the pass by which we were to cross the mountains to Unionville, we were obliged to skirt the range for some six miles over a rough apology for a road. We - that is Staples and myself, were a long distance in advance of the party, when King rode up announcing the demolition of Lewis wagon. Frank and Corporal John are to remain by it for the present. Longhurst was carried in the same team with myself and apparently suffered much from the jolting, as he groaned terribly. Entering the pass, we went through a little deserted village called Limerick. A stream ran through the pass on each side of the "divide", and was fringed by the usual shrubbery. A very steep declivity led to the plain on the other side, and Staples descended it with breaks

1867 off. Had not I had perfect confidense in him as a driver, I should have been scared. When we reached the plain, a fearful storm hung over the mountains, and Star Peak was crowned with the blackest cloud I ever saw, while lightning, hail and rain added to the wildness of the night. It was quite dark when we reached Unionville, and I was chilled through and very tired. The rest of the party came up some hours later, and several of them camped out in the rain. Most of us took refuge at the Exchange Hotel, C.K. Stampley proprietor, where we had a good supper and succeeded in getting warm again. The little parlor of the hotel seemed more civilized than any thing I had seen for months. The beds were fair, but I slept poorly being restless and a part of the time, chilly. I was awakened, too, from my first nap, by the arrival of O'Sullivan who shared my room with me.

Unionville is a very small place now, of some twenty families, but it was once much larger. It consisted of Camp 19. an upper and lower town, but the lower only, is now inhabited. The houses in the upper are mostly roofless and forlorn. They are built of adobe. Unionville is the county town of Humboldt.

Sep 15th The two teams started back for the wrecked baggage, and with provisions for those who had remained by it. It is a splendid, clear, autumn day, with a cold bracing wind. The latter has put to flight the mists and miasms which have been so long prevalent.

1867 Cloudy at intervals during the day. We took possession of an unoccupied stone house, with a kitchen below for Jim, where he had a good opportunity to show his culinary powers. We now consider our lines cast in pleasant places. One draw back to our comfort, is that one Bailey-butcher and dentist (a suggestive union of professions) uses our dormitory as his also, and bringing a companion with him; they snored, and talked so loud in their sleep that I was nearly distracted. Bought some woolen shirts. Saw Cap Sow, Chief of the Piutes in this district. He was rigged out in a cast off soldier's uniform, and with a Masonic belt over his shoulder. King gave him a dress coat in which he intends yielding up his bachelor privileges, as much as an Indian ever does.

Sep 16th The Hagues and Emmons arrived from a camp which they had established in a cañon south of here. Staples returned with the baggage from the wrecked wagon, which is to left where it was till a new axle can be made for it. Return of fever and ague. The noise made by the fellows in the room talking, and stamping about in their heavy boots on the carpetless floors, was terrible to me in my then nervous condition. Custer, too, accidentally discharged Watson's pistol over my head, while he was fooling with the weapon. The ball entered the wall of the house. An old fellow believing himself a doctor, came in

1867 and gave me some advice. He gave something to drink which tasted like stramonium. It had the effect of putting me to sleep. Thanks to him so far! Quite a snow storm and very cold for the season.

Sep 17th As the noise in the house continued to drive me almost wild, I moved over to the hotel, and received very kind treatment from Mrs Stampley, a very pleasant, active little lady. Had a sleep and woke up in a cold sweat. Begun to read Miſs Mulock's "Christian's Mistake", and was delighted with it. Slept poorly at night and revolved all I had ever thought or done, read or written.

Sep 18th King and a party including Clark and Gardner went off to explore in the neighborhood of Job's Peak - south east of here. (There is another mountain of the same name south of Carson. The people of Nevada seem to be worshipers of patience!) I had another fierce attack of fever and ague. The fever was the worst I have had, and was followed by a perspiration which was insufferable. I believe I could not have stood it, had I not thrown off the bed clothes, and thus cooled down. I can remember no greater physical suffering than that of this day. The fever left me in the night and I had a broken sleep.

Sep 19th Free from fever but very weak. I read a great deal and passed a part of the day over at the "barracks", listening to Jim Marryatt's edifying tales. Unionville does not give much evidence of the appropriateness of it's name. It seems intensely "secesh". A picture of "Stonewall" Jackson hangs in

1867 the parlor of the hotel.

Sep 20th Felt much better, but still very weak. Read and wrote. A warm, pleasant day. Emmons down with the fever.

Sep 21st Very weak, but otherwise better. Slept part of the day and read a good deal. Longhurst sick again. He remains at the hotel. Dr Hutchins happening to arrive here, I asked his advice about myself. He is a very pleasant fellow, and a Senator in the State Legislature for Humboldt County. He prescribed something for me.

Sep 22d Sunday. Read a little in an Atlantic Monthly and wrote a little. Had some pleasant chats with the Doctor and others. Emmons and Longhurst are still quite sick. I had a nap in the afternoon, but was much disturbed by the persistent and most infernal flies.

Sep 23d Felt awfully stupid and blue. Read, wrote and slept. The Doctor was summoned last night to ride to Lovelocks, a distance of thirty miles, to attend the wife of Lieut Foster U.S.A en route for Camp McDermitt. Very hot in the sunshine. I am in great need of exercise but dont dare to walk much in the sun, as it seems to make me dizzy. Found a copy of Charley O'Malley and renewed my acquaintance with Micky Free and others of its droll characters. It is just the book to read in such a hole as this.

Sep 24th Gardner, J. D. Hague and Staples came in, all unwell. Dr Hutchins returned from Oreana.

1867. and made me up some bitters for my continued stomachic disorders. Read and slept and re-read my letters from Lode and thought much of him and Laura and the little ones.

Sep 25th. Went over to our barracks to look at the preparations there making for the confinement of a murderer in our cellar. The County has hired the building for a jail. The ruffian alluded to has been taking his meals at the hotel table under the eye of the sheriff. He is a hard looking case, and is of course shackled. Very violent thunder storm in the afternoon. One flash and the consequent peal of thunder, were fearfully near. Read in the evening.

Sep 27th. Positively nothing of interest. I intended rejoining the party at the "barracks", but there were men there making alterations for the proposed sheriffs office, and the noise discouraged me from doing so. I am developing a fearful old appetite as the fever leaves me. This desert country will be unable to subsist me long. Agreeably surprised to find that Steve Ballow, the soldiers teamster, is an old Providence boy. He used to attend the High School. He is a hard nut, but quick, shrewd and witty. A gentleman visiting Mrs Stampley in the evening, brought in a lot of peaches, which he, Mrs S and myself did full justice to. This fruit is not indigenous to ~~in~~ Humboldt - and not very frequently imported.

Sep 28th. Read, slept and loafed much the same as heretofore. Had a long chat with Dr Hutchins in the evening. The sun is still very hot and effects my head unpleasantly.

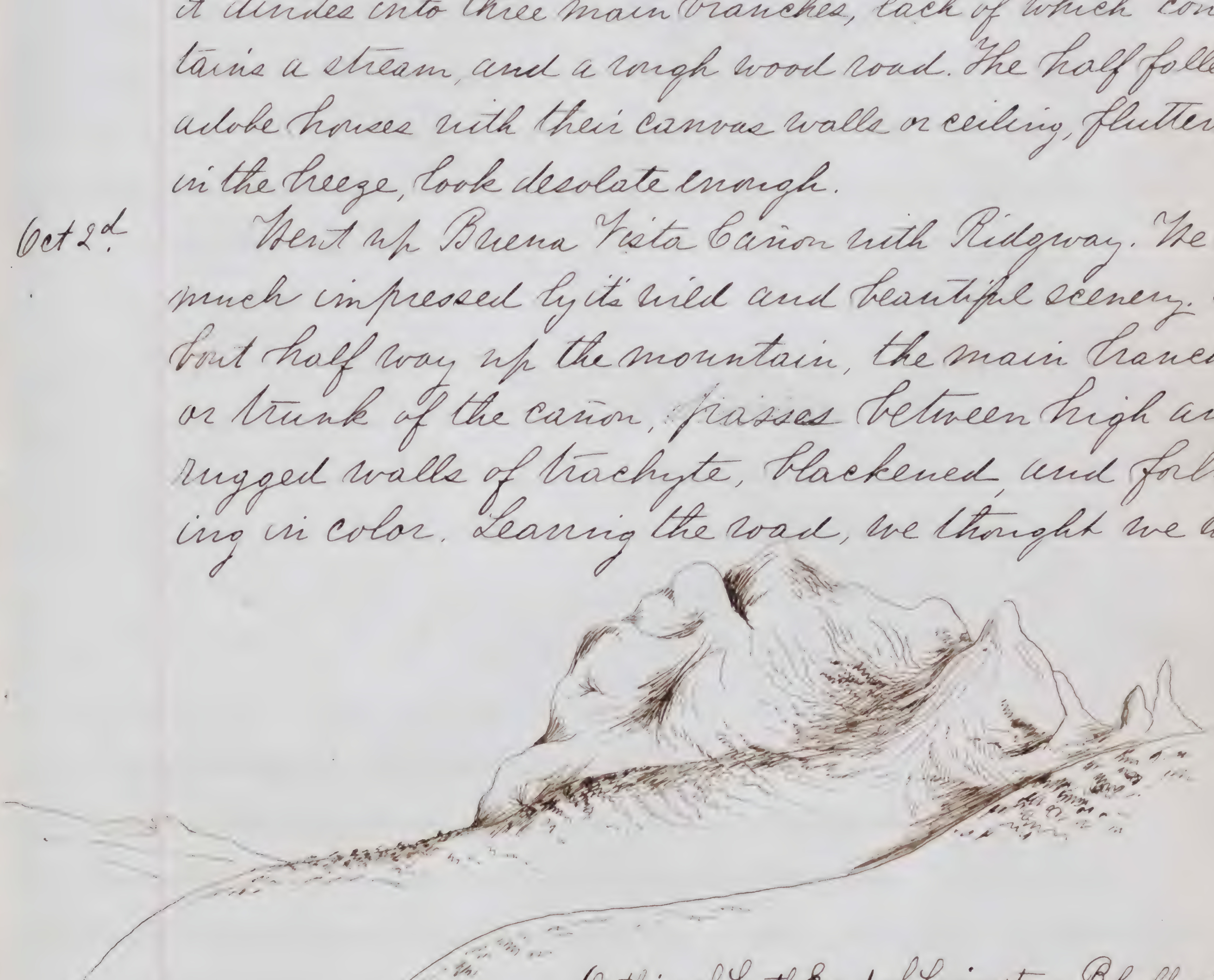
Sep 29th Visited the "barracks". Eat too much at every meal. Convalescence brings ruin to the larder!

King was taking observations the other day on Jobs Peak with a theodolite, when a thunder storm suddenly came up. Apprehending no danger and wishing to protect the valuable instrument from the rain, he approached to cover it, when the brass work acting as a prime conductor discharged its accumulated electricity into his person. The instrument was thrown quite a distance against the wind(?) He was paralyzed for a while and partially stunned. In telling the story, he always adds that his side turned of a coffee color and the skin pealed off. He suffered pain from the shock for some weeks after. Fred Clark was near by but did not know what was the matter. Cap Sav is with King on this present trip.

Sep 30th I cast my lot in with the crowd again, or in other words left the hotel. We exchanged buildings today with the Sheriff of the County. Our present house is not so substantial as the last, but is lighter and more airy. A canvas partition separates the room into two parts, one portion serving for a kitchen and dining room, and the other for a dormitory. Two tents near at hand are stored with the heavier baggage.

Oct 1st Took a stroll with Dr Hutchins to the upper town. This village is as before stated entirely deserted. I picked up a few plants near the stream which supplies both towns with water. The cañon in which Unionville is built, is called Buena Vista. Near the upper town, it divides into three main branches, each of which contains a stream, and a rough wood road. The half fallen adobe houses with their canvas walls or ceiling, fluttering in the breeze, look desolate enough.

Oct 2d. Went up Buena Vista Cañon with Ridgway. We were much impressed by it's wild and beautiful scenery. About half way up the mountain, the main branch or trunk of the cañon, passes between high and rugged walls of trachyte, blackened, and forbidding in color. Leaving the road, we thought we could



Outline of South End of Limestone Bluff, in Buena Vista Cañon, Unionville, Na. Oct 2d. 1867.

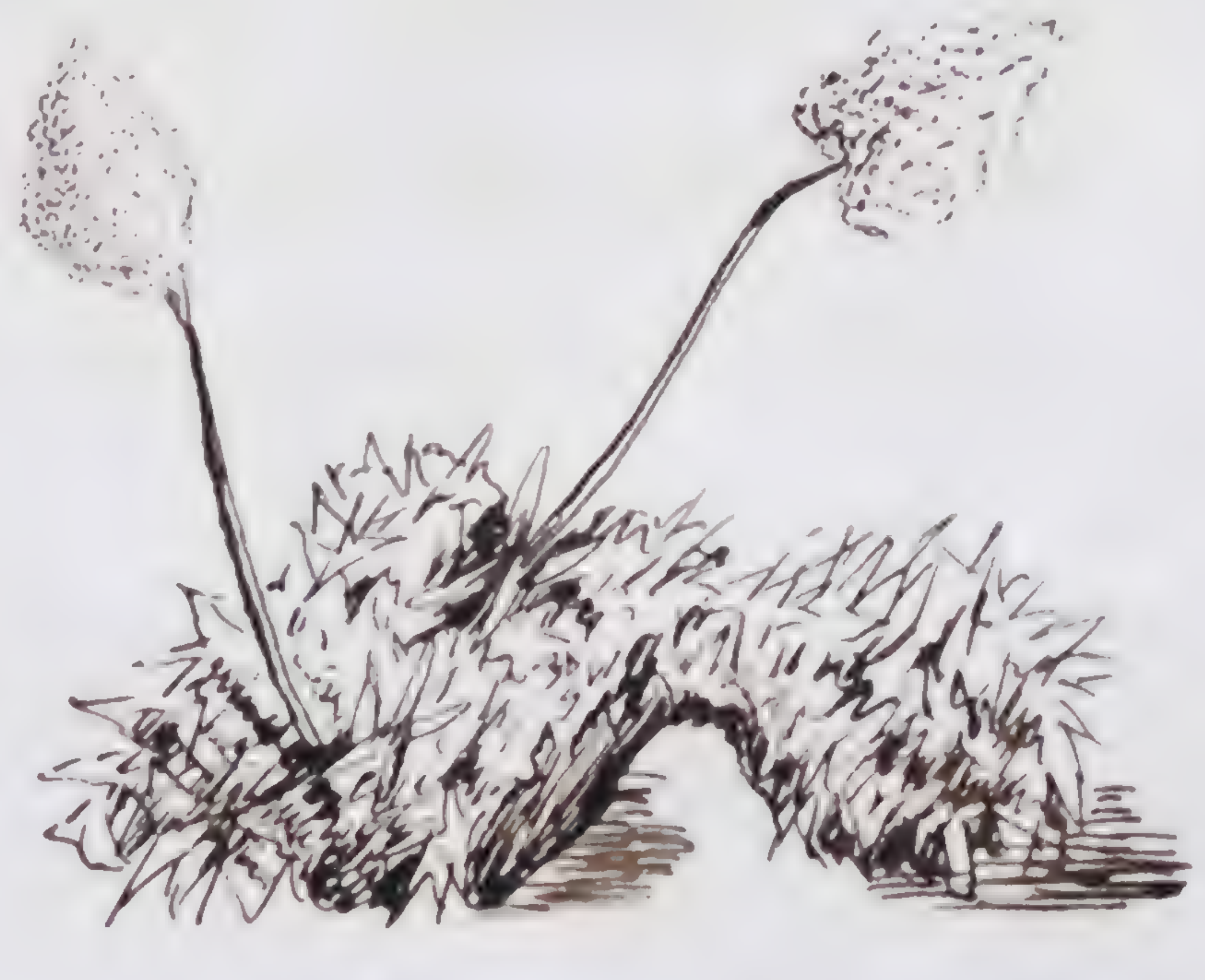
climb to a bluff which stood out prominently against the steel blue sky. Ridgway considered the bluff about twenty feet in height. I thought it two hundred, and when we reached it we both put the height at five hun-

1867 ded. The bluff which is of limestone, continues along the range for two or three miles or even more. It is perpendicular and very difficult of ascent. We had a hard climb and a most magnificent view to repay us for it. We discovered many singular caves and arches. One cavity under the solid mass of the cliff, allowed us to look tremblingly into the abyss below. We both took sketches, and found

X a few specimens. We killed with our revolvers a large rat with a bushy tail. The wind blew a gale on the top of the cliff, and Ridgway who had preceded me, reported it unsafe to advance. It was quite cool. The juniper and mountain mahogany (Cercocarpus parvifolius) were common, and also the curious Spiraea caespitosa, having the appearance of a moss. The plants on this side the range are quite different from those we found at Wrights cañon, and it is a rule that the flora of opposite sides of the same range, differs materially. We had a

1867 fine view of the desert between us and the East Humboldt Range, and also of the great salt flat, looking like a snow covered plain. Ascertained from a Piute his name for the wild tobacco, quite common near the town. He called it "poh'-monh'" - each syllable an interjection and very guttural.

Oct 3d. Ridgway and I went exploring up Buena Vista cañon again, and followed the left hand branch. My companion shot several birds. I found it rather late in the season for my work. This branch cañon is thickly wooded with willows, and the aspen (Populus tremuloides). The scenery is less bold than that we visited yesterday. King arrived alone in the afternoon. I slept out of doors at night in preference to being constantly waked up, though unintentionally, by the fellows in the house.

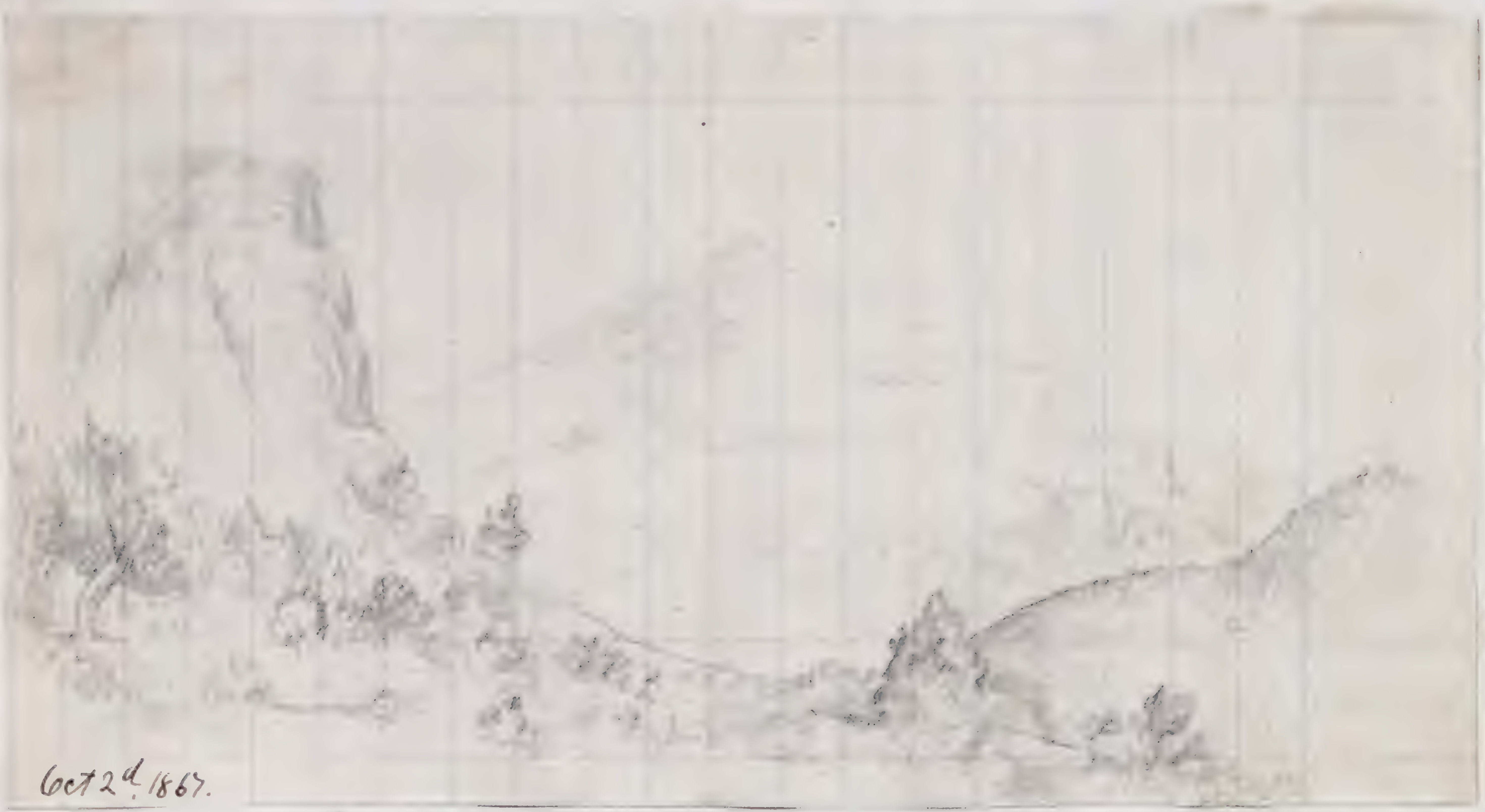


Spiraea caespitosa.

Oct 4th This cañon is thickly strewn with pieces of obsidian, resembling green bottle glass. It is used by the Indians for arrow heads. We have never found it in situ. I forgot to mention that while at Humboldt Lake, Ridgway discovered some Indian decoy ducks of most ingenious pattern. A duck itself was stuffed and placed upon a sort of boat made of wicker work. Often the natural attitude of the living bird was preserved, as in the turn of the head to one side. We sent these

1867. models to the Smithsonian Institute. Dr Hutchins, Ridgway and I took a long walk across the divide to Coyote cañon. We had a magnificent view of the limestone bluffs, the boldest and most impressive scene I have ever beheld. Star Peak rose against the clear sky at a distance of ten miles, but looking at least eight miles nearer. We could discern all the little ravines and depressions upon the mountain.

Star Peak from Buena Vista Cañon Lime Ridge



The view back upon the desert and the East Humboldts was also fine. We could see the roads crossing the plain and entering the distant mountains, and often a column of dust from them, would rise a thousand feet into the still air. The top of one of the mountains was flat or appeared to be, like a table. The descent into Coyote cañon, was a rough scramble down sandy and rocky declivities, covered with sage brush.

1867. The cañon itself is more fertile than is usual for any district in this country. A stream of water runs through it, fringed by a luxuriant miniature forest of aspens and other small trees. We had a limited but refreshing lunch near a little spring, to the orchestral music of Ridgways rifle and halloo, as he brought down some new bird. The boy was perfectly delighted with the place, and indeed it was beautiful. We were shut in by the steep sides of the cañon, while at it's head, rose the stupendous bluff of limestone. Looking to the east, the cañon gradually descended to the plain, but it's windings prevented a view so far. This canon like most others in the range, splits into two or three branches. Our return over the divide was even more arduous than our morning tramp. Upon our arrival in Unionville, we found the rest of the excursion which went out with King, returned. I passed a cold night in the open air.

Oct 5th. Slept out of doors as usual, all by myself. There was a violent wind in the night, which covered me with dust. Gardner started by stage for California to recruit his health.

Oct 6th. Sunday. A heavy rain storm changing into snow. At noon the mountains were clothed in white, and presented a beautiful appearance. After dinner we played "questions and answers", choosing some biblical personage or subject to guess as it was Sunday. We had a great deal of sport out of it. Lot's wife - was one of the subjects to be

1867 guessed. J. D. Hague and I were on one side, against Arnold Hague and Emmons on the other. We asked them what the chemical constituents of the thing were? They gave in reply a long list of elements but left out chlorine. This of course baffled us. Hague finally inquired how it would act in a tube closed at one end? and the answer "it would decrepitate" settled the question in favor of common salt and its synonym Mrs Lot. A cold and stormy night. The passing cloud shadows on the white covering of the mountains, have been most beautiful today.

Oct 7th A slight coating of ice and snow on the ground in the morning. The mountains white with it. Walked up the cañon with Ridgway. It is pay day, which is always a joyful occasion with us. Some of the fellows were awfully gulled in getting their checks cashed, by the agent of Wells, Fargo and Co. This young snob is also postmaster, town clerk and general functionary of creation. He is proportionately airy.

Oct 8th. Ridgway and I followed up the right branch of Buena Vista cañon passing under the limestone ridge over into Coyote cañon. There was considerable snow on the higher parts of the mountain, and the air was very cool. We saw a huge eagle circling over the lime ridge, six hundred feet above us. Ridgway obtained many birds. We took pretty much the same course we had pursued the other

1867. day when Dr Hutchins was with us. We got back to the town about four o'clock. King and J. D. Hague started for a trip through Idaho. We shall be obliged to move to another house tomorrow, as our present one has been rented. Staples and I moved our blankets tonight, and made ourselves comfortable by a huge open fire place, piled with blazing juniper logs.

Oct 9th All the party moved over to our new quarters today, & find them very pleasant. We have two large rooms, running the whole length of the adobe house. Jim uses one

for a kitchen, and we also make a sort of office of it. The other is used as a dormitory. I drew a flower in the morning, and called to see Mrs Stampley. Custer is very sick and Emmons not so well as in the last few days. The Doctor was in several times during the day, and in the evening he and Staples, both from Maine, told us stories of that State, while we sat by the jolly big fire. Some of the fellows played whist. Jim goes out almost every night to play poker with the Indians, and comes back with

1867 his pockets full of money. I fear he does not treat the aborigines fairly.

Oct 10th Had a slight return of sickness. Felt quite unwell in the morning. Took a stroll with Dr Hutchins and Ridgway in the afternoon. We met Watson with several new plants, among which was a splendid Hepatica. Dr Hutchins took tea with us. We all played cards till a late hour.

Oct 11th Felt quite unwell. News of Democratic victories in Pennsylvania and Ohio. Being a secession hole, flags are displayed all through the village. I started on a stroll with the Doctor and Ridgway, but felt unwell and returned. O'Sullivan photographed the county officials. While sitting in front of the hotel in the evening with Staples and Bayliss, heard Gen Harris (a secessionist) make a really comical speech. He only had four or five for an audience, and I think few of them believed what he said, but all were amused at his ready flow of language. Our stores which should have been left here or at Star City, arrived from Cisco, where they have been all summer. The wished for tea, however, is not forthcoming. Slept in one of the tents. The noise of the house is intolerable to me. A violent wind and a sprinkle of rain in the night.

Oct 12th Wrote a letter to the Providence Journal. Took a systematic course of medicine. Read a little. O'Sul-

1867. livan photographed several of us. The sick are better today. Visited Mr Perkins in the evening, at the office of the Humboldt Register, the only Democratic sheet published in this State. Had a fine sleep in the tent.

Oct 13th. A note received from Gardner inclosing the key to the medicine chest, which he had accidentally walked off with. He reports his own and Longhursts' safe arrival at Hunter's. O'Sullivan opened the letter as King was absent. O'Sullivan is now earning a handsome sum daily by photographing the people from the town and from the neighbouring mines. He has an extempore gallery rigged up in an old roofless stone house, which the papers advertize as "Mr Sullivan's Photographic Gallery No 3 High Street. It is the only house on the street, and there is no street there and barely the one house. Read a part of the day.

Oct 14th. Emmons, Arnold Hague, Clark and Anthony left for the Black Rock region, taking the escort as the country is infested with hostile Indians. Custer, Watson and Bayless start with them, but eventually take a different direction. One or two of the soldiers will also accompany them. To avoid the bustle of departure, I saddled old Jennie and rode up the cañon. As I was returning, when far up the cañon, I saw ahead of me what I supposed to be a coyote, and begun to feel for my six shooter, in order to have a crack at him. Seeing these warlike preparations, the supposed coyote rose up, and proved to be an Indian on his way over

1867 the mountain with some goods. I expect I frightened the poor fellow, but like the school boys whipping. I dare say the "Lesson will not come amiss".

There is now plenty of house room. Myers a sick soldier is left behind with us. I found some plants to day and wrote up my notes. The Doctor was in several times during the day. After we had retired for the night, a party of drunken and boisterous Humboldters, mostly officials came after O'Sullivan, and returned with him late at night, raising the very devil in the house, and waking us up thoroughly.

Oct 15th. Received a packet of letters and papers from the East. Made some sesqui-chloride of iron for Dr Hutchins who wished to use it as a tonic in his treatment of fever cases. Began a letter and made several sketches.

Oct 16th. Drew pictures of scenery and wrote. Looked at "J. H" photograph for awhile. I took a ride down towards the desert in the afternoon, and a stroll with O'Sullivan and Dr Hutchins after dinner. Air quite cool. O'Sullivan is left in command here. Our animals are kept at a corral in the lower part of the town and we all have to go down and feed and water them every morning. It is a tremendous nuisance and some of the fellows shirk terribly.

Oct 17th. In the afternoon I visited the Arizona and the Manitowwauk mines with Dr Hutchins. We went

1867 over, under and around the mountains. In order to reach the mines we had to take a long and ~~up~~ hilly walk up one of the side cañons. Stopped to see the miners at their house, about 8000 feet above the sea, and proceeding to the mines some distance further on, went into them both. They are worked by Mr Fall of Unionville, who also owns a crushing mill in the town. (Mr King tells me in the fall of 1868, that the Arizona is doing very well.) The silver occurs in quartz specked with blue and green malachite, I should judge from the color. The ventilation is poor. We returned to town by a shorter cut, namely down the steep face of the divide.

Oct 18th. Took a walk with Dr Hutchins and Ridgway up the cañon. My companions unearthed and killed an enormous flat tailed rat, a wild species quite common here. The Doctor came up to the house in the evening, but felt unwell and retired early. The rest of us had a game of euchre.

Oct 19th. Unwell and kept quiet all day. The Doctor was ill too.

Oct 20th. Still unwell, but on the whole better than yesterday. Staples, the Doctor and I had a little sing in the evening.

Oct 21st. Jim and I took a long ride after a missing mule. We took one of the side cañons and went nearly to the top of the mountain, 8000 feet. In one place I had to pull my horse over the rocks by main force. Several times we dismounted ~~alighted~~, as the ascent was too much for the horses even without a load. We reached the divide between Buena Vista and Indian cañons, and looked down into the latter. A species of ceanothus was growing in great abundance at this ele-

1867 vation. Returning we descended into Buena Vista cañon with some difficulty, walking part of the way to prevent the saddles from slipping ~~from~~ over the horses necks. Upon my return was seized with chills, fever and head ache. Took an emetic and was sick all night. Dugan of the Emmons escort came in for the mail. He reports the Black Rockers all well.

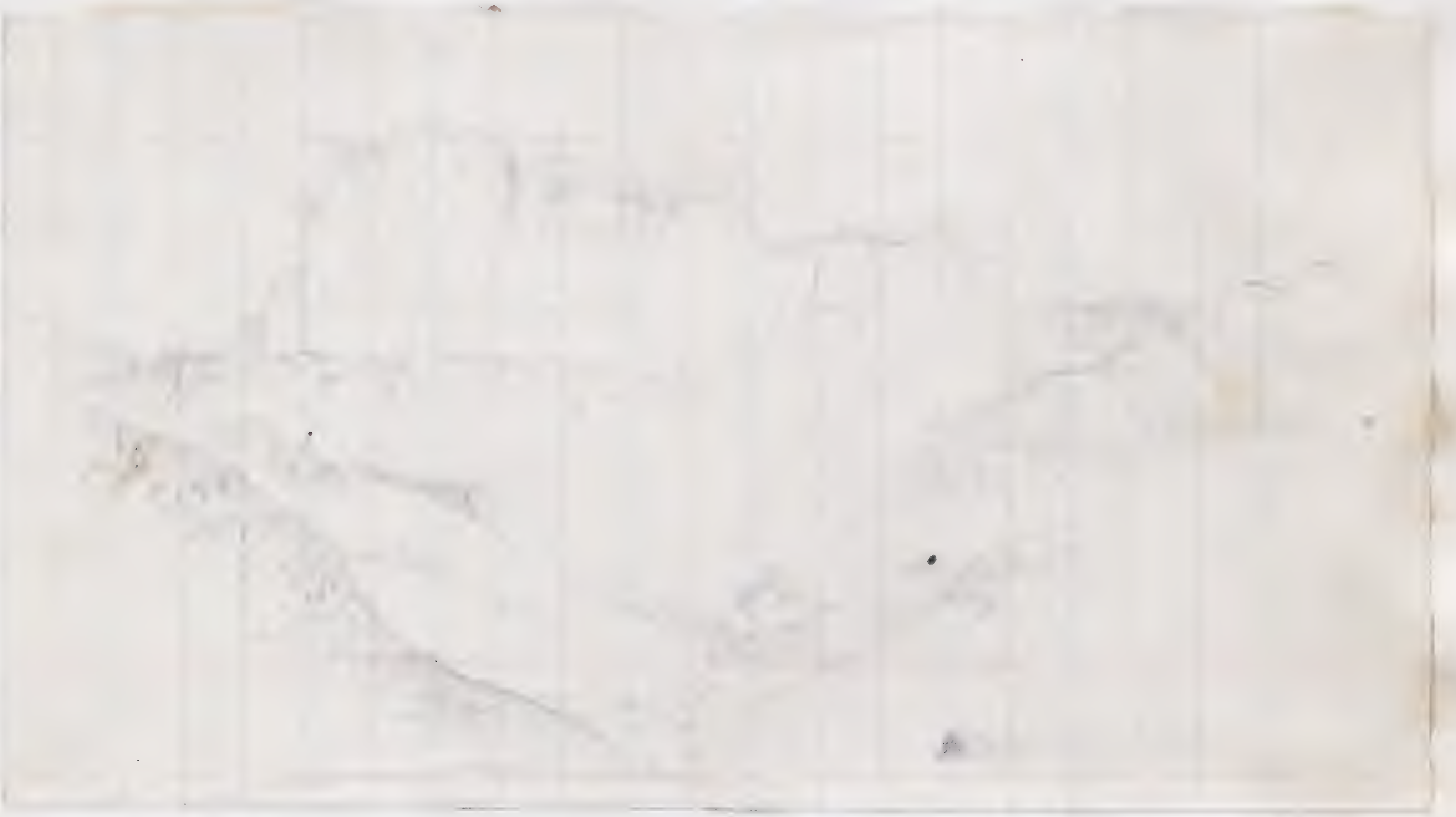
Oct 22d. Received a letter and wrote one. Dr Hutchins is keeping house for O. K. Stampley who has gone to Virginia City, and I had several little chats with him at the hotel. The Doctor makes a good bar keeper.

Oct 23d. Violent attack of fever again. I think worse than ever. Took refuge at the hotel, where I could have Christian treatment and comfort. A terrible day and night. There is an old lady staying at the hotel with several children. I voted her a nuisance. The following doggerel was written in her honor some time after the events of the day.

"There was an old lady lived under a hill,
And I wish to the Lord she dwelt there still,
For here with her "row and rumpus and riot"
I'm blessed if a sick man can ever be quiet.
And even the well men are oft' heard to swear
They'll turn up the young ones and paddle them where
They'll feel it awhile, and may be keep still,
But I'm not the man who'll encounter the Tartar,
For the crown of John Rogers that wonderful martyr,
or any other man!

1867. Oct 24th. My off day from the fever. Very weak and sore. I passed a most horrible night although I took Dovers powders to insure rest.

Oct 25th. Much better than yesterday, but effected with nausea after eating. Chills and fever omitted, thanks to the Doctors quinine and capsicum. O'Sullivan received two letters from King



Lime Bluff - From Coyote Cañon Oct 8th '67 Unionville, Nevada.

with contradictory orders, the last saying that he and Hague were going to San Francisco by way of Oregon. He orders the party to Glendale. Custer was brought in in the evening so ill that he had to be carried about. He is in a very bad way and looks as if he might peg out.

Oct 26th. The post man from Oreana reported this morning that King will be here to morrow. Telegram received saying that Gardner had left "Frisco" in quite good health. I feel much stronger and better to day. Watson arrived. He remained be-

1867. hind his party in order to complete some necessary work.
Oct 27th King did not arrive, nor did we see him until weeks later at Glendale. Packed up ready to start tomorrow. "Lisle Lester" gives readings here tonight; She is said to be one of the strong minded kind, and is now on her way to the States.

Oct 28th. We found that Waldron, one of the soldiers had deserted, taking O'Sullivan's saddle and his companions rations. He left his sabre behind. Corporal John thought he had taken his overcoat and grew quite eloquent over his wrongs. We left the Corporal to look out for Custer, as he is too ill to be taken with us. I expected to be unable to ride so soon after an attack of fever, but had no difficulty. Left Unionville and had a fine farewell view of old Star Peak and the giant ridge of limestone. I rode ahead of the train with Ridgway. We crossed the West Humboldts by the same route we had come, namely by the Spring Valley Pass, and the deserted town of Limerick. We had a very cold ride. Ridgway and I met a solitary coyote in the pass and popped our six shooters at him, but to no purpose. He looked almost translucent with hunger. It was growing dusk as we descended into the valley of the Humboldt, and the sun gave a mysterious glory to the weird peaks far to the north. I thought of the views we see in Pilgrims Progress of the first view of the Celestial City. It might have been behind these mountains but decidedly it was not. No more utter waste exists on the face of the continent. We two had a dismal

1867. ride across the sage brush, where we could hardly see where we were going, and were only guided by the lights in the mill at Oreana. It was very dark when we reached that place - a long time before the teams. Before going to bed I stopped at the grocer Spencer's, who treated me to a most delicious glass of port wine right from the cellar. I put up at the little wretched hotel in a crowded room, in preference to sleeping on the bare ground with the thermometer at zero. Camp 20 Ridgway stayed up to wait for the party, who came in in a disorganized condition. The teamsters and O'Sullivan &c camped outside.

Oct 29th. When I went out to see the fellows in the morning, I found them shivering around a miserable fire with the thermometer at +13° above zero. The Humboldt was frozen solid and I had to cut a hole through the ice, in order to wash. In the mean time my moist sponge had frozen to the ground. I thought I should have to content myself as Mr Squeers advised Nicholas Nickleby to do, with a "dry polish". We of course had a cold breakfast. O'Sullivan and I were conducted through the smelting works by Mr Nason, "the gentlemanly proprietor". The ore used is one of silver, lead and antimony. Until recently the latter metal has been allowed to escape into the air. We saw, however a large pile of antimony pigs lying outside the mill. We stop here today in order that O'Sullivan may photograph the works. "T. H." and I dined with Mr Nason and the Agent of Wells, Fargo and Co. Both gentle-

1867 men were very hospitable. "T. H." was quite successful with his negatives. In one view, all the teams of the concern appear with their drivers.

Oct 30th Left Oreana (thank God!) and passing Lovelocks reached Parkers Station. While stopping at Lovelocks' to water the horses, Bayless and I partook of some excellent pie at a little grocery shop. At Parkers (the meanest place with the most infernal water on earth) we found the two boys of our former visit, with the addition of their mother and sister. The old lady was a Tartar and thought precious little of us as an Expedition because we did not profess belief in all the fabulous stories concerning the wealth of the region, which she chose to tell. She had an infinite tongue and pitched into us one and all. We had a very hard time to find wood sufficient to cook our tea. We were obliged to grub for the roots of greasewood+, and barely found enough to produce a blaze. An old fellow from Montana, calling himself a Doctor, accompanied us today and got us to transport his traps, which we would not have volunteered to do if we had known how weighty they were to be. The old chap is a bore! O'Sullivan and myself slept together in the loose hay of the corral, with all the spare blankets besides our own which we could scrape together. We barely succeeded in keeping alive the vital spark at that. The night was fearfully cold, and my slumbers

+ obione

Camp 21.

1867. were by no means balmy in consequence.
Oct 31st Travelled to Sprague's
Station, nineteen long Nevada miles.
We were in sight of Humboldt Lake
most of the way. It is a broad and
beautiful sheet of water. The mountains
which slope down to one side
of it, look very steep and are very
strangely channeled and riven.
The Trinity Range, on our side of the lake, is quite a distance
from us, with a long sloping desert reaching to it.
Watson left the train in order to make observations and
rejoined us in the evening. One of our mules played
Camp 22. out and Staples had to bleed him in order to keep him
alive. It was only by cruelly beating him, that he was
finally made to reach camp. I have an awful cold today.
The advantages for camping are less even than last
night. A Chinaman keeps the station whose knowledge
of English is chiefly confined to profanity, in
which he is a great proficient. We had to take some
of his wood in order to make a fire. Even roots were
unobtainable in the sterile region around us. Of course
we slept out of doors again. O'Sullivan and I together.
A man passed us with a wagon of apples for Unionville,
of whom we obtained both apples and grapes. These were
a rare treat to us.

1867
Nov 1st. Camp 23. Thermometer +21° in the morning. A most dreary days ride. Passed the hot springs where I stopped to bathe a corn which had been very painful all day. Reached Gaspar Meigs station. Watson has been behind us taking observations as usual today. Ridgway went to see if he could shoot a wolf which was feeding on the skeleton of a horse near by. He was unsuccessful. We managed to get some sage brush and roots together for a fire tonight.

Nov: 2d. Camp 24. Rode all day through a most infernal sandy desert where the wheels sunk up to the axles. Watson and I preceded the train, occasionally joined by O'Sullivan and Jim Marryatt. A cold wind blowing. The first sight of the Truckee from above Cowles, was like seeing home again. The cottonwoods were now brown and sere, but still they were *trees*, and as such most welcome. I sung out "Thalassa! Get Jennie!" and Watson and I put for the river. The wagons followed the road, which continues on the high ground, while Watson and I struck a trail near the brink of the river and rode on to Ricketts. This trail was wild and romantic, sometimes leading us into the willows near the water where we had to look out that we didnt lose our heads among the branches, and again climbing a steep bank where a false step might have been fatal. The pure water rushed on joyously and with a gladsome music. As I was suffering from a cold I concluded to stay in the house.

1867 where I had an excellent supper. I have scarce ever seen more variety on any table and the dishes as a rule were well cooked. It is surprising what good meals can some times be obtained at these unpretending little way side inns. After supper I visited the fellows in their camp near the river, where they were celebrating their return to a wooded country by a huge fire. It was built against a fallen cottonwood which itself finally entered into the conflagration, sending sparks whirring up toward the stars that twinkled at us from the clear sky. The music of the river was the orchestral accompaniment to this brigand-like scene. It was decidedly the prettiest camp we have had, and every body was in good humour. I went to bed about eight o'clock. I cannot say much in favor of my sleeping apartment, but I man-

1867. aged to pass a comfortable night
Nov 3d. Waked very early by the arrival of the stage from
Glendale passengers by which informed us that Gardner
was at that place and wished us to come on.
Rode with Watson ahead of the train to Clarke, where
we enjoyed a good dinner. It seems very homelike here,
where we have always been made so welcome. Clark is
a jolly farmer from Pennsylvania and has a fine
house and ~~farm~~ ranche here. Every thing about his place is
as neat as wax. One of the best institutions of the house
is the huge open fire place piled with blazing logs. I
stayed in the house here as heretofore, and slept in a
Camp 25. very cold room adapted for the accommodation of
twenty or more persons. Fortunately but one other person
occupied the room with me.
Nov 4th Thermometer 16°F. in the morning. Arrived at Glendale
about noon, having ridden most of the way by myself.
We found Gardner expecting us. I lost my spectacles
in the hotel and never saw them again; a most
serious deprivation. I stayed at the hotel and had a very
Camp 26. comfortable room. Two fiddlers regaled the bar room in the
evening with lively music, mostly jigs. The audience
was rather picturesque but decidedly promiscuous.
Dave Scott, the Surveyor of Washoe County was about
the house during the day and very drunk. Among
other freaks, he persisted in mounting his horse
with his face toward the tail, and was led through

1867. the street in this way.

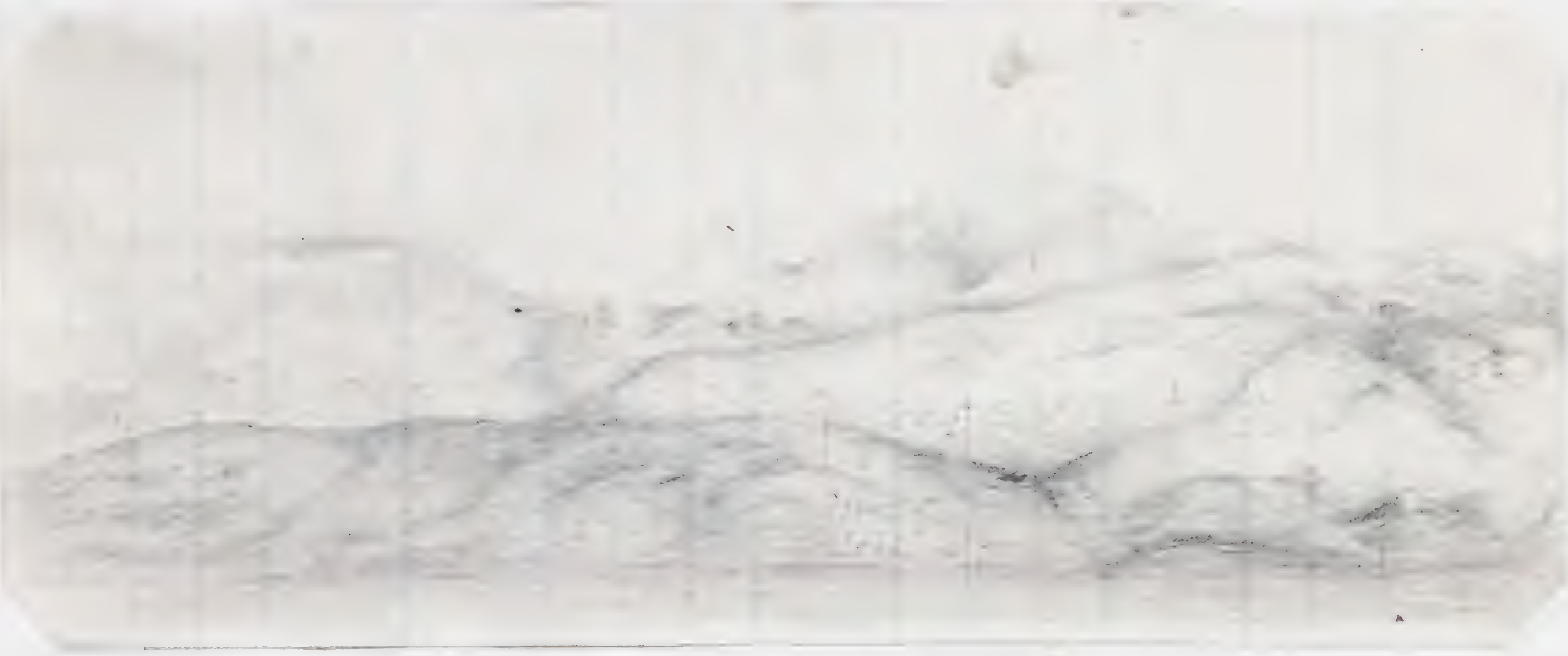
Nov 5th Left the hotel and together with the rest of the party took possession of a house situated out in the meadows. It belongs to one Blaisdell who now occupies a smaller establishment on a neighboring knoll. He built this house of ours in very good style for this country but in a most impracticable place, which is moreover unhealthy. "The rains descended and the floods came" and he had to move to higher ground. The arrangements of the house are very convenient but it is too far from town. Gardner and Staples went to Hunters and Lew with one of the Blaisdell boys started for Peavine after a stove. In the afternoon I rode into town with O'Sullivan and saw old Scott, still drunk. He apologized in a maudlin way for his impertinence yesterday. Heavy wind. Very dusty. Gardner and Staples returned about supper time. It rained violently in the evening.

Nov 6th Raining and windy. A wild and stormy day. The clouds totally obscure the mountains. Staples and I drove over to the saw mill, some three miles to get wood. We worked like dogs until we filled our wagon.

Nov 7th Unwell. Felt cross and miserable all day. A clear, bracing day. The tops of the mountains are covered with

1867 snow, and look finely. Our house is completely surrounded by water and almost flooded. It suggests "Beautiful Venice", or the Fisherman's Island in Undine.

Nov 8th Gardner, Watson, O'Sullivan, Bayless, Marryatt and a pack train started for Pyramid and Winnemucka Lakes. There is joy in the house of Blaisdell. Staples, Ridgway, Myers and myself are all that are left behind. Wrote several letters.



11.000 feet. Washoe Peak from Glendale.

Nov 9th Sketched a view of Washoe Mountain. Wrote. Walked in town in the afternoon and read the papers. There is a short cut to the village but it is very wet and the pasture is full of cattle, almost always unsafe to pass on foot in this country. I have been this way several times, however, dodging from one side of a fence to the other, as circumstances seemed to require. Corporal John arrived from Unionville, reporting Custer convalescent. He says he missed his way and was chased by Indians, and thinks he shot one.

1867. Nov 10th Sunday. Rode over to Hoffacker's P.O seven miles to carry and obtain the mail. Rode the mule lately so sick on the Humboldt road. It was all I could do to make him even walk. Had a wretched dinner at the station for which I payed the price of a good one. There was the usual crowd playing cards and drinking. The roads were in a fearful condition owing to the late rains. The alkaline soil when wet is very adhesive and balls the horses' feet. It is said to injure the hoof. Met the bar keeper of the Glendale House on the way back, and rode with him for a while. Gardner carried off my mare on his expedition - hence the necessity for my riding some one elses beast. Didnt find the letters at Hoffacker's, but at Savage's store in Glendale. I received a tremendous mail. Met Corporal John in town and carried a bundle for him, as he was on foot. When I reached Blaisdell's little house on the edge of the morass, and near the corral, my mule refused to carry me any further, and as the house wouldn't come to me, I was obliged to dismount and wade. I was fearfully angry. A restless night.

Nov 11th. Wrote a letter illustrated by several sketches. The soldier Myers had a return of the fever. Wrote one private letter and my fourth to the Providence Journal twenty pages in all. Staples, Corporal John, and Ridgway were gone all day in the mountains after wood. Wrote another letter in the evening.

Nov 12th. Drove into the mountains with Charley Staples after

1867 wood. We had a long and pleasant drive in the "thorough brace" with two mules only attached, and after obtaining a wagon full of juniper logs, returned to a little empty hut near by, and enjoyed a festive lunch. The cabin was made of boards and had an immense stone fire place. The wood district belongs to Blaisdell, and such as it is there is abundance of timber on it. Saw a fence on the way back formed of up rooted sage brush. Passed a Piute camp, where we saw several horses with their two front legs tied together to prevent them from straying. King arrived from Hunter's during our absence and proceeded to Virginia City before our return.

Nov. 14th Took a jaunt to Hunters on O'Sullivan's famous mustang, an animal remarkable for his negative qualities. He has one positive one also, which is equally disagreeable, namely a habit of going out of his way to find objects to shy at. Arrived at Hunters at noon, and being very tired, concluded to stay all night. Hague left here before I arrived, for Glendale. Met a Mr Corcoran (!) the assayer of the Black Rock ores, who talked to me for a long time about those strange products. No one but the proprietor of the mine and those in his interest has ever been able to obtain a trace of metal from them by any chemical process, and still this man loudly proclaimed that he had done so, and that

1867. the ores were rich. (The whole thing was afterward exploded by the careful analyses of Arnold Hague. Put into a room for the night with a man from the Golconda Range – wherever that may be. Suffered from dyspepsia all night.

Nov 15th Eat breakfast early and rode back to Glendale. Found Hague there who told me about his recent trip with King through Idaho and Oregon. They visited Boise City and the mines in that vicinity, and crossing the Blue Mountains into Oregon, descended the Columbia, obtaining fine views of Mounts Hood and Jefferson. They visited Portland and from thence proceeded overland to Sacramento, passing Mount Shasta. Hague was very much impressed with the latter mountain. It is about 14.000 feet in altitude, and near it, as if for comparison, is Little Shasta, 6000 feet, or about as high as Mount Washington, and as compared with the greater peak, looking like a thimble beside a sugar loaf. I wrote several letters during the day.

I should state that King and Hague were passed free over all the roads, not spending one hundred dollars for the whole round trip of over a thousand miles.

Nov 16th. Started with J. D. Hague to ride to Hoffackers but in passing through Glendale, my companion received a note requesting him to proceed to Hunters. He started in a great hurry and I tried to accompany him

1867 but not being as yet an experienced equestrian, I found I could not keep a good seat on my mule so long as he loped, and gave up the pursuit of Hague now a long way ahead of me. A mules' lope is quite different from a horses and more unsatisfactory. I continued on to Hoffackers, deposited my letters, had a vile dinner, and returned. I rode Clark's mule, a jolly little fellow to travel and well named Mark Tapley. Passed a large number of Piutes of both sexes with horses and colts, returning from the gathering of pine nuts. (Large edible seeds of Pinus Fremonteana(?) They have a pleasant terebinthine flavor). The women were walking and acting as beasts of burden, while the bucks lounged on horseback. The movement for "woman's rights" has not yet started among them, and no native Curtis has appeared.

Nov 17th. Stayed in the house. Staples went to Hunters with the light wagon and didnt find King who was to have been there. Hague, too, had gone on to Virginia City. They left a note saying they would be at Glendale tomorrow with Parker.

Nov 18th Walked in town, read the papers and looked at the spur exercise of three fighting cocks bellicose in a barn yard. (Why should we refer to their existence as typical of perfect bliss? Does it afford any man unalloyed pleasure to pick out his rivals eyes? I think

1867. not!) Bought some apples and the village offering no further attractions, returned to the house chewing that classical fruit and wondering whether it was really a Rhode Island greening mother Eve plucked one day and did give to the man. King, Hague, and Parker arrived in the evening with Parkers team and span of horses. They brought me several letters. Of course we had a jolly evening as we always do when Parker is on hand.

Nov 19th. Hague left for Unionville in order to bring Custer down. After he had gone, King received a dispatch saying that Custer would arrive by stage tomorrow. Ridgway and Parker went down into the marshes hunting, and returned after lunch.

Nov 20th King, Parker and Ridgway left for Carson City intending to stop tonight at Washoe. I walked in to the village in the afternoon. Corporal John who had been sent by King to Crystal Peak to bring up Parkers riding horse, was unable to find him, and returned. I sent a letter to C. L. Perkins Esqr of the Humboldt Register inclosing a sketch of Unionville which he wished me to make for him. For this, he sent me papers all winter.

Nov 21st Charley and Corporal John drove into Glendale after Custer, but found he had not arrived. Hub Parker and Ridgway returned unexpectedly. They had been to

1867. Peavine instead of to Carson. They spent the evening skinning birds. King has gone over to California. We received a note from Custer in the evening, dated from the village, telling us of his arrival and requesting that a team should be sent for him. I sent Myers to tell him that owing to the darkness and the wet roads, it would be impossible to bring him out to-night. When Myers reached the hotel, he found that Custer had retired.

Nov 22d. Parker and Ridgway left for Virginia City. Custer arrived. He had seen Gardner and party at Lovelocks Station on the Humboldt, and Hague at Oreana. I went out with private Myers in the morning and practiced shooting at a mark with my revolver and his Spencer rifle. He was a very good shot, and I did very well for the first trial.

Nov 23d. "Bored" to near death with dyspepsia. Corporal John went into town after ale for Custer. This Corporal is quite a curiosity in his way. He is a German and of excellent education. He never will tell his real name. He studied for the priesthood in his early life He claims to have been a colonel in our late war. He was a street car conductor when he enlisted in the regular army while drunk, and found there was no retreat for him. He is a tall, fine looking man, but easily overcome by very little wine or liquor. He sings finely from all the operas, even from such as the Czar

1867. and Zimmerman, seldom if ever heard in this country. He is well posted, too on German literature. He was greatly delighted with a copy of Phoenixiana which I lent him and his guffaws could be heard all over the house when he happened upon an amusing place. He is naturally a kind, simple hearted fellow, with no force of character and easily led astray. In form, he is tall, handsome and soldierly. I remember with what withering scorn he used to turn upon his blackguard companions when they were doing or saying some vile thing. He would say: "It makes me to doubt there is Gott in Heaven to see you men". The force of the rebuke was lost upon them, as they knew he would soon be blaspheming himself - perfectly oblivious of what he had previously s~~ate~~aid, and apparently innocent of the inconsistency. We all liked the man while we laughed at him. He took a particular fancy to me, and we used to sing together, and talk of Undine and the Nibelungen.

I tried with Myers assistance to put my pistol together, which I had taken apart to clean. It was no go, however, owing to the bending of the main spring.

Nov 24th Raining. Hague arrived. Wrote, and read the papers. Hague told me of the unexpected storm my second letter to the Providence Journal had created. The Reese River Reveille had criticised it severely, partly for a mistake I had made on King's authority in regard to the old name of the Humboldt river. The Austin editor

1867. does not like it because I have not represented the deserts of Nevada other than they are. Honesty in this case was not the best policy. Suppose, however, that any one had said to me that Rhode Island or New York were barren wastes, knowing the contrary I should merely smile. It is truth only that hurts. However, God knows I never intended to give offence to any of the people of this State who have been uniformly kind and hospitable. It never entered my head that there could be any difference of opinion on the subject. I never made any reply to the criticism, but should like to see the man who wrote it, who must be a smart fellow - a little based by self interest.

Nov 25th Walked into the village and on the way met an old fellow who informed me that our mules were in the habit of breaking into his corral and eating his hay. He was justly offended, and I referred him to Hague. It is no special wonder that the poor animals thieve when they can, rather than starve in the icy fields about our house. The old fellow demanded damages but I told him I was not the man to take them out of. I feared we were going to have a row. I believe Hague succeeded in satisfying him, as he referred him to Custer and the latter told him to wait till Gardner returned. I begun to write a connected account of the season's work in botany as a preliminary report to King. A clear, fine day.

1867 Nov. 26th. Hague rode towards Peavine. Custer and I wrote or read. A rather cold, windy day. Much troubled with dyspepsia. The Black Rock party, so long separated from us, returned, reporting the desertion of Sergeant Martin and the previous villainies of that nice young man. He knew that Corporal Holloway intended to report his false dealings with the people and his tampering with vouchers. He left from fear of discovery and punishment. The party had a hard time and was in a dangerous district. A man was killed quite near them and the body was seen by all the men when it was brought to the station. The U. S. officer in command of the place, together with the citizens, requested the aid of our escort to pursue the Indians. Emmons allowed any to volunteer for the duty who desired to go, but the officer before mentioned was not ready at the right time. The volunteers and a few citizens started off without him. It seems he was drunk half the time.

The party saw nothing of the criminal Indians but came near having a row among themselves oweing to a very serious mistake. Seeing a lot of mounted men approaching them, under the circumstances they naturally felt alarmed, thinking them a band of "Los". They immediately cocked their rifles and prepared to to resist cavalry. The attacking party was that of the whilom tipsy captain who had at length taken the field. They felt as skittish as the attacked. "There they are" said the captain, and by Jove! they look as if they

1867 mean to fight. Charge them boys and the sons of (canine mothers) will run". Still the descendents of terriers didnt run, and this fact as much as any thing else finally showed the blunder that had been made. The fellows suffered very much from cold on this trip. Emmons had his regular shakes.

The escort have now encamped near on the dry ground just beyond the morass. I expect if Blaisdell has any poultry, he will not receive pay for it all. Holloway is in command. (He is the son of the late Superintendent of Patents at Washington, and has since obtained a commission).

Nov 27th Went with Frank and Myers after wood. We confiscated a load which somebody else had been obliged to leave by the side of the road.

Nov 28th Thanksgiving. It was voted in the morning that we should have a swell dinner, and cider being advised as the least inebriating and yet cheering beverage, I went into the village to procure it. On my way back, I stopped at the soldiers' camp, where Steve Ballow invited me to ride a lovely little mare he had purchased at Black Rock. I mounted her, but had not been on her back two minutes, when she started at a sage brush in the road. I lost my balanse and pitched off sideways filling my hair, ears and nose with sand. This is my first throw, and long may it remain the only one!

1867. We had a grand turkey dinner and lots of fun. We were all in the spirit for it and jokes flew about as rapidly as the tin cups of cider. Before we had completed our meal, Gardner and his party came in from the Humboldt as hungry as young lions. Hereupon ensued a great hand shaking and much mutual inquiry. We had made such havoc with the dinner that another had to be prepared for the newcomers. There was a long talk about the desertion of Sergeant Martin, in the evening, in which Steve Ballou shone by his droll wit. There was much fun at the expense of that once gallant and much admired warrior. I received a paper from Mr Perkins containing the criticism on my second Journal Letter.

Nov 29th I went to the village with O'Sullivan, and read the papers. Gardner went to Hunter's to telegraph King. He ascertained that the latter was at Virginia. I had a head-ache all the afternoon and evening. J. D. Hague and Emmons visited Steam Boat Springs. Clark and his mule went out on the mountains to take topography. I dont know which was the most successful, but the mule certainly returned first, leaving Clark to foot it.

Nov 30th King arrived and held a long council of war with Gardner. The latter will take the field again with a party, while the rest of us seek winter quarters at Virginia and Carson.

Dec 1st Sunday. Went in town in the morning with Lew, Frank ~~and~~ Charley and Steve, the four teamsters, to procure provisions and grain.

1867. Dec 2d. Some Indians came in from the reservation to see King, bearing aloft on a pole, a fresh scalp of a Pitt River Indian whom they had killed in battle in Long Valley. The Pitt River tribe is hostile to the whites, and these Piutes evidently thought they had done a big th~~em~~ing in extinguishing them. They were led in the battle by Winnemuck and accompanied by whites who had ~~done~~ had their cattle stolen by the prowling tribe of Pitts. They had an interview with King by means of an interpreter, and requested him to send the scalp to Parker, with a note stating the circumstances which had put it in their hands. Hague wrote the note and took the trophy with him to Hoffacker's, tied to his pommel. These Indians were a villainous looking set, and would probably take our hair if they had a chance as willingly as they had their fellow red-skins!

We left Glendale and rode to the foot of the Geiger grade, leading to Virginia City, where we put up at a hotel. It was raining in torrents. We left Gardner behind, together with Arnold Hague, Watson, Clark and Staples. They are to work near the California line, in Long Valley.

Dec 3d. Rode to Virginia City up the Geiger Grade, a most splendidly engineered road, which winds in and out among the mountains, with a constant ascent all the way. The scenery is splendid, the foreground often being very savage and wild, and the distant view of the Sierra piling peak on peak, is a sight one never tires of

1867. beholding. Often one can look from the side of the road far down into a deep cañon. A few scattered trunks of trees indicate that the mountain was once tolerably wooded, but not a tree is now left standing. All have long since yielded to the rapacious wood chopper of Virginia. (Wood sold there in the winter of 1867–8 at \$35–\$40 a cord, in gold). While ascending the grade, we met an escort on their way to Fort Churchill. They have left us now for the winter, with the exception of one or two who accompany Gardner. Virginia City is 6200 feet above the level of the sea,– higher up than the "tip top" of Mt. Washington. It is situated on the slopes of Mount Davidson and in it's ravines and cañons. It is built over the great Comstock Ledge of silver ore, and it is not an unusual thing for buildings to settle or even to sink into the mines, some of which are nine hundred feet in depth. It is a busy looking place, especially after one has just come from the limited number of a camp. Steam whistles from the smelting works and mining establishments are heard snorting in every direction, bells ringing, and teamsters swearing at their mules slowly dragging huge loads of ore through the streets. Tramways are seen leading all about the mountains, and dumps of refuse of great size are a characteristic feature of the place. Once in a while a Chinaman is seen driving a donkey loaded with wood which he sells at some fabulous price. Sometimes he has a number of these animals in charge. Indians also are seen here and there, and the rapid stage coach whirls through the streets. The principal thoroughfare is C

1867 Street. We found that there had been a light fall of snow, which made the streets rather sloppy. Dined with Custer and O'Sullivan at a restaurant called Delmonicos. The city is much larger than I anticipated, although Jim Marryatt had given me glowing accounts of it. After dinner, we went up to the Ophir House, or residence of the Superintendent of the Ophir Mine, where King, Gardner, the Hagues, Emmons and Marryatt are going to stay all winter. The house is neatly furnished and seems like a palace after what we have lately experienced. O'Sullivan and I spent the night at the International Hotel, where we had a room that smelt like a charnel house. The proprietor of the house, Mr Swift, is from Providence. T. H and I took a warm bath in the evening.

Dec 4th Leaving Emmons and J. D. Hague at Virginia, we proceeded towards Carson, Custer and I riding ahead of the train. Custer was occasionally far in advance of me as my horse stumbled badly and could not be trusted to go down hill faster than at a walk. When Custer began to ascend a hill, I would put spurs to old Jennie and soon catch up to him. As we went out of Virginia, we had a fine view of the city and of Gold Hill, which is virtually a part of the same place. The town extends through a long cañon far down towards the Carson river. In the distance can be seen the Humboldt and other ranges of mountains. The road was in excellent

1867. condition and we enjoyed our ride exceedingly. The first view into Carson Valley was very lovely. We dined at an hotel kept by a Frenchman, and had a very good dinner. Custer regaled me with much conversation on the road. Just before reaching Carson City at 2½ P.M. we were joined by King and O. Sullivan, and our little cavalcade pranced into town in good style. At the White House, which was to be our residence, we found Parker and Ridgway awaiting us. Our house is jolly in every respect, and each man has a room to himself. I never appreciated bachelor comfort so much in my life. We will dine in a smaller house near by, which is being fitted up as kitchen and dining room under the directions of Parker. At present we take our meals at a very excellent little restaurant. King and Parker went to a party in the evening.

Dec 5th. Carson is quite a town, and is nestled at the foot of the Sierra Nevada. It has one long principal street and other small ones branching from it. The only building with any pretentions to beauty is the U. S Branch Mint which is built of stone quarried at the State Prison. There are several very good hotels, one kept by a Rhode Islander named Gardner, and the other by a big bellied Swiss with a pretty daughter. His name is Tufly and he is a most jolly old fellow. A plaza occupies the centre of the town, but is disfigured by a wretched, half ruined wooden house, where the Washoe squaws and young bucks disport them-

1867 selves. Several streams of good water flow from the Sierras through the town, and shade trees, mostly populus monilifera, are not uncommon. It must be quite a pretty little place in summer. The side walks are made of planks, and the whole aspect of the place reminds me of New Brunswick, except that there is an aspect of enterprise about it which is lacking in that country. It is the capital of Nevada, and the Legislature meets here every alternate year. Found quite a number of letters awaiting me. A beautiful rain bow all the afternoon.

Dec 6th Parker and Ridgway went to Pyramid Lake for a bird hunt. King has gone to Fort Churchill. Received two more letters in the evening and wrote several. I had a big sing after supper in which Custer joined. We retired about ten o'clock. Begun my report for King.

Dec 7th Continued my report. It rained all day.

Dec 8th Showery. I went out in the morning to ascertain whether there was to be an Episcopal service in town, but learned that the church was not finished and no Rector at present resident. Continued my report. Lew and Frank returned from Glendale whither they had taken the animals. We retain two mules for winter use.

Dec 9th Rained violently all day. Drew and looked over my specimens. Sent some Virginia City papers to the East. Bought a sketch book and pocket

1867. dictionary.

Dec 10th A fair, clear and breezy day. Much snow on the Sierra.

Dec 11th Went out after microscopical specimens for Lode. Read and drew all day. A beautiful halo noticeable around the moon in the evening. The colors were very delicate and were those of the spectrum read inversely from the moon. Inside of the iris was a band of white, immediately contiguous to the moon's disk. A snowy looking sky at the time.

Dec 12th. Walked, read and drew. Mc Garigal (I am not sure about the orthography of his name), a clerk to Parker, showed me through the Assembly rooms. They are very ordinary. The State Library is small and mostly composed of law books. and the statutes of the different States. It is placed in a very comfortable room, where I often used to go to read. There were preparations in the Assembly rooms for a great calico party (whatever that may be) to take place tonight. King arrived, read my report and offered a few suggestions.

Dec 13th Wrote a letter to the Providence Journal. Watched O'Sullivan print photographs. He is at the gallery of Frank Ludlow, through the kindness of that artist. Drew a little and took a walk. A fine day.

Dec 14th. A splendid day. Wrote up a synopsis of the doings of the Survey until this date, for the service of King. All information was derived from my own notes. Walked down to the Hot Spring's Hotel and Swimming Bath with some of the fellows. They are kept

1867 by Lance Nightingill, a well known pioneer and hunter of this section. The hotel is a substantial structure and apparently very comfortable. It is on the road to Empire and Virginia Cities. and about a mile and a half from Carson. Had a delicious plunge in the baths. Shade of Nero! we are many points ahead of you. You never enslaved the subterranean powers and made them minister to your comfort as the Yankee nation has done! You may get out! I had too much of you in college. Large rooms are here filled with clear, warm water to the depths of four or five feet. The water has a very slight smell of sulphur. Steps descend into it, and rooms are provided for dressing. The whole thing is a great institution. Attached to the hotel, is the Nevada State Prison, which we also visited. We were kindly conducted through the whole concern by the keeper. Lieut Gov Slingerland. The building is of stone, quarried on the spot, and is neat and substantial and I should think well adapted to its purposes. The uniform of the prisoners is a grey striped with black. There are no female prisoners at present. A cat and kittens frolicing in the jail, was very suggestive to me. I hope the poor birds do not think of what Miss Puss put into my head. Copied vouchers for King in the evening.

Dec 15th Went down to the baths with King and Anthony. Met a Mr Parkinson, a friend of Kings. Wrote two letters.

Dec 16th Drew a little and read. King returned to Virginia.

1867. Dec 17th A great fire in a drug store on Carson Street. We all rushed out to see the fun(?) and some of our fellows worked at the engine pumps until it seemed evident that the owners had no particular desire to save the building, when they ceased to labor and contented themselves with looking on. There was very little energy displayed in the proceedings. Sheriff Smith died from the effect of wounds received in an attempt to arrest a murderer. Flags at half mast.

Dec 18th Snowed and rained all day. Funeral of the Sheriff. Lance Nightingill is appointed in his place. I read all day. Sent a file of Nevada papers to the Providence Journal.

Dec 19th A splendid day. Read, and spent some time at the photographic gallery. Watched the operation of printing.

Dec 20th Nothing important. Snowed. The Indians in Carson City are of the Washoe tribe, but a remnant of which remain. They can with difficulty converse with the Piutes whose language is quite different. They are said to be allowed the use of horses except by the will of the Piutes, who subjugated them in battle.

1867 Dec 21st O'Sullivan, Frank and Lew and myself went down to the Hot Springs and had a royal swim. Lieut Gov Slingerland showed us through the prison again. Several of the fellows had not seen it before, and it is sincerely hoped they may not often see it again, however well deserved. O'Sullivan and Frank went to the theatre in the evening. This institution is a small and by no means select concern. A clear day.

Dec 22d. Heavy snow in the night. Rained in the morning. Wrote two letters. Called to see Miſs Tufly with O'Sullivan and Frank Ludlow. An awful rain storm, amounting almost to a flood. (Our house was for several days completely surrounded by a deep and raging torrent from the mountains. We tried to bridge it, but the water swept off the planks, and the only way to cross it was by wading breast deep. A branch of the stream separated us from our dining room, and nearly carried off that little establishment).

Dec 23d Watson, Clark, Staples and Private Mitchell arrived. Gardner is in Virginia City. They had a very hard time campaigning in the snow. Clear in the morning but raining in the afternoon.

Dec 24th. King and Gardner arrived. I went to the Episcopal Christmas tree in the evening. Rained again.

Dec 25th. Christmas. King and Gardner returned to Virginia. Raining violently. We had a pail of egg nogg in the morning, and Frank Ludlow, Sergeant

1867 Judd, and Gardner proprietor of one of the hotels, were in to help us dispose of it. We had a pretty good dinner to which the same persons were invited. It rained in torrents all day and it was difficult to get out of the house. O'Sullivan, Anthony and Bayless went to a German ball in the evening.

Dec 26th. Went to the State Library in the morning and read for a little while. In the evening visited and introduced myself to Mrs Blackburn, a widow lady living in the same house with us. She has a nice little girl. Had a sing with her, and altogether a very nice little call. The postmaster was there at the same time. Steve Ballou, formerly teamster to our ~~A~~ escort, is in town with a theatrical company.

Dec 27th An early breakfast. Frank and Lew started for Glendale to take the animals from thence to Long Valley. Clear. Went to the Carson theatre with Clark and O'Sullivan. It is a mean little hole, and the audience afforded me more amusement than the actual performance. All criticisms were offered aloud. The play was quite passable. I was very sick all night.

Dec 28th Quite unwell. An exceedingly cold day. Stayed at home most of the day and read.

Dec 29th Sunday Called on Mrs Blackburn in the morning and borrowed some reading matter. A cloudy day. Water frozen in my pitcher. My room is always dreadfully cold, and I can barely keep warm at night. Quite unwell.

1867 Dec 30th Read. Visited Mrs Blackburn and showed her "T. H.s" photographs. Hailing and snowing, cold.

Dec 31st Raining in torrents. Our house surrounded with water. The mountain stream takes it in its course. A long detour necessary in order to reach our dining room. The fellows made a vain attempt to turn the stream. Visited Mrs Blackburn in the evening.

Bye bye, old year and Heaven send a better one!

1868.

1868. Jan 1st Raining and snowing. The flood still continues. Sacramento is reported to be under water. The mails across the mountains very irregular. We are all without money and are much in need of it. We have borrowed from one another until there is not a cent left in the party and John Chinaman is clamorous for pay for his washing. I finished reading Beulah and consider it great trash. No human beings ever convers in so formal and constrained a manner or talked about metaphysics constantly in their daily intercourse.

In the evening O'Sullivan, Clark and myself visited Miss Tuffly and offered the compliments of the season. Refreshments were served and received with thanks, and the conversation was lively and pleasant. After returning to the house, I begun to re-read

1868. the "Fair Maid of Perth". A little sunshine during the day Jim Marryatt came down from Virginia to attend a negro ball.

Jan 2d. Snowed heavily during the night, and the storm continued in the morning. Barometer rapidly falling. A man was shot at the negro ball last night. Jim has been summoned as a witness but has cleared out for Virginia. He says it is the last "nigger ball" he will ever attend. Continued reading the "Fair Maid of Perth". Mrs Blackburn invited O'Sullivan and myself to her rooms in the evening to play whist with Mr Ben Small, the Postmaster, and his Assistant. A very heavy wind towards night, and I lost my hat by merely stepping out the front door of our house. It was blown into the plaza and I didn't care to trust myself to go after it in so wild a night, and with such uncertain footing. I recovered it next day from the stable keeper who found it, after fully identifying property.

Jan 3d. Wind very violent. Several houses unroofed during the night. A telegram from King ordering O'Sullivan and Clark to report at Virginia tomorrow. They started today on mule back. Jim, who had been down again as a witness, also returned. Finished the novel I had been reading. Took a walk in the afternoon as far as the wretched state of the streets allowed me. In the evening begun to re-read the "House of the Seven Gables". A fair, but cold and breezy evening.

1868
Jan 4th. Snowing heavily. Wrote a letter to Uncle. Felt unwell and took a nap. O'Sullivan returned from Virginia City without the expected money. All of us panic stricken. Clark remains in Virginia. Parker and Ridgway are at Hunters waiting for the flood to subside in order to come to Carson. All the bridges across the Truckee are carried off, and the roads in a horrible condition. Visited Mrs Blackburn in the evening by invitation. Received several letters from the East.

Jan 5th. Drew a monogram for Clark. A fair and very cold day. Our money checks arrived from Virginia City. O'Sullivan hired a new cook, a white man named Lisle. He is a kind garrulous sort of fellow. Hawkins, his darkie predecessor got tight too much.

Jan 6th. Got coin for my checks. A cold day, with a tendency to snow. Parker and Ridgway arrived in the evening. Visited the Smalls with Parker and O'Sullivan.

Jan 7th. Went out hunting with Ridgway near the Slaughter House. A clear and very cold day. Frank and Lew returned in the evening from Long Valley.

Jan 8th. Worked over my specimens in the morning. Visited the photographic gallery. Read a little. The weather more moderate. Pay rolls arrived to be signed by all hands. Two vouchers for Clayton, the owner of the White House. Parker and I sung for awhile in Mrs Blackburns room, and afterwards we all eat apples and chatted in our own parlor, Parker being

1868 the donor of the fruit and the leading spirit in the conversation.

Jan 9th. O'Sullivan and Anthony went to Virginia City. Clear and breezy. Went over to Parker's office and was introduced to Gov Blaisdell. He is a very tall man. Drew, painted, and read. Spent the last part of the evening in Parker's room.

Jan 10th. Painted Gilia pulchella. Hunted about town to find Clayton in order to have him sign a voucher for rent. Cloudy, with a tendency to snow. Spent the rest of the evening in Parker's room.

Jan 11th. Painted Erythraea ——. Mr Small brought me a series of the Pacific R. R Reports for reference. Staples went to San Francisco to see his daughter. He conveys a lunatic as far as Stockton. Bayless went to Virginia City. After dinner, Watson and I walked to the Hot Springs and took a bath. We all spent the evening with Parker.

Jan 12th. Drew pictures of flowers and read from the Pacific R. R Reports. Spent the evening with Parker. Snowing and windy. Parker dined with us. He slept with me, or rather I with him, in his room.

Jan 13th. Drew flowers all day. Received several letters from different people. Parker and all the party but Ridgway spent the evening at Mrs Smalls. Slept with Parker. We retired at 2 P.M.

Jan 14th Drew flowers. Frank arrived with our specimens from Virginia City. Busy all day. No clouds over the

1868 Sierra — a rare occurrence.

Jan 15th Copied barometrical reports for King. Worked at my botany. Watson and I visited Mrs Blackburn in the evening. She herself was not at home. We were entertained by her neice.

Jan 16th A splendid day. Thawing. Copied some flowers. Worked at my specimens. Parker went to California

Jan 17th Worked all day. Clark arrived from Virginia City in the evening and he and I visited Mrs Blackburn. We had a pail of lager bier late in the evening which Clark paid for and I went after.

Jan 18th Drew and read. Received a letter from King desiring me to make an inventory of the Government property in Carson City.

Jan 19th Sunday. Wrote letters. Read "No Thoroughfare" and after reading it, received another copy per mail from Lode!

Jan 20th Took an inventory of Government property for King and sent it to him. Drew flowers and worked at my botany. Watson is similarly engaged and gives me much aid. Wrote several letters. Clark and I visited Mrs Blackburn in the evening.

Jan 21st Worked all day. Went to the Episcopal Hop in the evening with Mrs Blackburn. All the rest of the fellows went, but only Clark attempted dancing. I tried it once and failed, after which

1868. I took my place among the statuary. A very pleasant occasion. It was held in the Turner's Hall, and was given to raise money to pay off the debt on the new church.

Jan 22. Worked all day. Spent the evening with Watson in Mrs Blackburn's room. She has been obliged to move down stairs owing to a leakage in the roof which has thrown the plastering on the floor, and threatened to drown her out. Her former room is now a picture of misery.

Jan 23. Worked at my specimens and drawing. In the evening went out to call upon Miss Tufly but found her out, and also upon Dr Juder with a like result. I then returned home, read chemistry, smoked a cigar and retired.

Jan 24th. Clark and I visited Mrs Blackburn in the evening.

Jan 25th. Worked all the morning. Anthony, Clark, Watson and myself went down to Hot Springs in a team of Billy Wilsons, that jolly Jehu accompanying us. There we met O'Sullivan, Bayless and Ludlow returning from Virginia. A very jolly spree. In the evening visited Mrs Judge Johnson with Clark. Received a lot of meteorological records taken at the summit of Donner Pass, which King wishes me to copy.

Jan 26th. Warm and snowing. Wrote to the Journal. Gener-

1868 ally unwell. A lot of the fellows went out with the sleigh. We use our two mules Andes and Jap. and attach a cow bell for the necessary jingle.

Jan 27th Copied barometrical reports for King. Took a stroll on the street. Frank, Ludlow, Judd, O'Sullivan and myself played whist in our parlor.

Jan 28th Copied barometrical reports. In the evening visited Mrs Blackburn in her new house. She had to move from her old room owing to the leakage. O'Sullivan mounted some of his new pictures taken in the deep mines of the Comstock Lode. by means of magnesium light. They are very fine. Late in the evening we all had a pitcher of beer. Ludlow was in and amused us with stories of more or less credibility of the wild days of this young State.

Jan 29th Worked all day, copying and drawing. Received a letter from Dr Gray. Visited Mrs Johnson in the evening with Clark and Miſs K. Judge Johnson lent me a volume of botanical plates of Wilkes Exploring Expedition. A cold night.

Jan 30th Wrote to Dr Gray inclosing plants of Watsons and my gathering and a sketch of Spiraea caespitosa. Copied barometrical register. Started for the Presbyterian Social with "T. H." and Clark. My companions continued on, while I returned and played whist with Lew. Judd, and Ludlow.

1868. Jan 31st. Worked all day. O'Sullivan received a telegram from King for him to come to Virginia. We had a game of whist in the evening in which Ludlow joined. Miſs Kinkade was at the house this morning to see Mrs Atchison, an old lady who is ill here, and although poor, refuses the aid of the county commissioners.

Feb 1st. -14°. Miſs Tufly and Miſs Cushing were over to see Mrs Atchison and of course saw and were seen by others. I had quite a chat with them in the hall. Worked at my botany &c. Went with Frank and Lew to skate, but the pond was so small and so crowded with little boys, that I gave it up. O'Sullivan went to Virginia. In the evening Clark and Anthony and myself called upon Miſs Tufly.

Feb 2d. Sunday. -16° Fah. Wrote several letters and received one. Attended service at the Presbyterian Church with Watson. Rev Mr White discoursed on Pilgrims Progress. He is State Mineralogist, beside his clerical duties and thinks of going out with us in the Spring as far as the State Line. (He actually did accompany the party).

Feb 3d. Worked all day over my plants. We expected King down but he did not arrive. Clark and I visited Mrs Blackburn and purchased tickets for the Episcopal Hop tomorrow. The Good Templars had a ball in the White House.

Feb 4th. King came down in the evening and seven of us

1868 went to the Episcopal Hop and had a gay time. Got home at 3 A.M. Judd and O'Sullivan returned.

Feb 5th King, Anthony, and I went sleighing with Mrs Blackburn under King's wing, and also had a fine skate. There were many ladies on the pond. King, "Y. H" and I called on Miſs Tufly in the evening. I spent the day in paying bills for King.

Feb 6th Mild and pleasant. Holland, a friend of Clark's arrived. He came out as a sailor around the Horn. He is to join the party. King went sleighing (slaying) with several ladies. I worked in drawing and copying. Went in the evening to Mrs Johnson's reception with King, Clark and Holland. I felt unwell and stupid but the affair itself was jolly.

Feb 7th Mild and breezy. Felt unwell and slept all the morning. King returned to Virginia, taking Judd with him. I called on Mrs Blackburn in the evening.

Feb 8th Rather cold. Clear or snowing a little at intervals. Worked at my drawing. Went to see Miſs Maynard with Mrs Blackburn.

Feb 9th Sunday. Clear and cold. Called on Miſs Tufly with Loudlow but she was sick and couldnt see us. Palmer arrived from Fort Churchill. This gentleman is employed by Mr King as a clerk and secretary. He has been engaged in similar duties in the

1868 army for some years. He has been a traveller over most of the world.

Feb 10th Palmer returned to Virginia. Gardner arrived in the afternoon. We all had a big row in the morning which blew over and left a dead calm by noon. A lot of us went to see Mrs Blackburn in the evening.

Feb 11th −16° Fah. I drew all day. In the evening a lot of us went out by invitation to Mrs Rails. I had a bad cold and felt quite unwell. Gardner returned to Virginia City about noon.

Feb 12th −6° Fah. Compared barometrical registers with Holland to see whether my work was correct. An awfully tedious job! Drew a little. O'Sullivan went to a ball at Genoa. Clark, Holland and Watson went to a party at Mrs Clarks. I retired to bed about 8 o'clock.

Feb 13th Pleasant. Drew all the morning. Went to see Mrs Blackburn in the evening and afterwards attended Mrs Johnson's reception.

Feb 14th Drew in the morning. Went skating with a party of ladies and gentlemen near the Hot Springs. We had a skating quadrille, in which I figured with Miſs Maynard. Watson and Clark came down on mule back to see the fun. Holland, Anthony and Thé Hale with myself went down in Parker's wagon. There was a Methodist Social at the White House

1868 in the evening but I did not attend. Retired early.

Feb 15th. Drew all day until just before dinner, when Judd gave us a drive. In the evening most of us went to a little gathering at Mrs Blackburn's and ended the night in The Hale's office.

Feby 16th Sunday Clear and warm. Visited Miſs Tufly in the evening with Clark and Holland.

Feb 17th. Drew flowers and a view of Mt Lincoln which I afterwards tore up. Went to Ludlow's gallery for a short time. I was invited to Mrs Lewis's in the evening but did not go. Visited Mrs Blackburn.

Feb 18th. Warm and sunny. Drew all the morning. Arnold Hague, Emmons and Palmer came down from Virginia. We all went to the Episcopal Hop in the evening. I had a headache and soon left.

Feb 19th. Emmons and Hague returned to Virginia. I slept a part of the day. Feeling quite unwell. In the evening, although feeling wretchedly, went to Miſs Tufly's birthday party at the earnest solicitation of "T. H."

Feb 20th. Drew. Made a short call at Mrs Blackburns with Holland. Cloudy and thawing. Palmer returned to Virginia. Rev Mr White had his farewell reception in the evening at the White House. There was a large attendance. I had a long promenade with Mrs Johnson, and feeling quite sick, retired to bed at Tuflys to escape the noise.

Feb 21st. Wrote to Mrs Cushing. Drew a little and

1868 and slept. A warm, thawing, and disagreeable day. Visited Mrs Johnson in the evening and was nearly lost in the mud in the attempt to reach her house.

Feb 22d. Washington's Birthday and my own. I am twenty five years old. Warm and thawing. O'Sullivan, Loudlow and Judd went to Virginia City. Attacked with fever and ague in the afternoon. Had Dr Benton in to see me. The fellows went to see Mrs Small in the evening.

Feb 23d. Weak and ill. Taking medicine. Read most of the day and retired early. Wrote to Uncle.

Feb 24th Very ill all day. O'Sullivan telegraphed to Uncle William in Providence for me, to send money in order that I may go over into California to recruit.

Feb 25th. Took a short walk on the street in the morning. Visited Mrs Blackburn. Gardner arrived. Some of the fellows went to Mrs Smalls in the evening. I re-read John Brent with great delight. It is a perfect picture of the glorious out of door life of the West. A weary, fidgetty and restless night.

Feb 26th. A "Henry Carbine" which I had sent for to San Francisco, arrived. It was selected by a Mr Peck, an uncle of Frank Anthony and a crack shot. It is a beautiful gun. Felt weak but better than yesterday.

Feb 27th. Nothing happened worth recording. I drew a little and read both in the house and at the State Library.

Feb 28th Visited Mrs Small in the evening. Worked in the morning and read at the State Library.

1868
Feb 29th Parker returned from California. I drew and read. We all went down to the Baths in the afternoon in the "thoroughbrace". My money arrived by telegraph from Providence. Parker slept with me, as his brother and another man occupy his room.

March 1st Sunday. Very windy and rather cold. Received Boston papers. Wrote to Loode. Parker slept with me.

Mar 2d. I drew a little and read at the State Library. The fellows all went to Mrs Lockhardts in the evening. Of course I did not.

Mar 3d. Read and slept. Went out with Frank in the afternoon and practised with my rifle under the tuition of Frank Anthony. I had written to King about my proposed trip to California. He replied, saying he had no doubt that I would experience a temporary relief from such a change, but he considered that as the disease had taken such a hold upon me, it would be best for me to return to the East for the present and join the party next year in Colorado. This was a hard blow to me, as I had laid out much money for the ensueing campaign, and my heart was enlisted in the work. I replied, however, agreeing with his propositions and offering to resign. The fellows think it strange that the suggestion should be made to me more than to any of them, as many of them suffered equally from fever. Received my months pay. Visited Mrs Blackburn.

1868 Mar 4th. Raining. Packed my trunk. Wrote several letters; among them one to Prof Gray. Palmer came down from Virginia. King wishes me to go up there.

Mar 5th. Snowing. Quite unwell. On my back most of the day. The pains in my back are almost insufferable. I have to prop myself up with pillows. Expected to go to Mrs Johnson's reception, but of course was unable. Besides, the affair was postponed.

Mar 6th. Drove up to Virginia City in Billy Wilson's stage. At Empire, I had my first view of the Carson river. It is a narrow and not very prepossessing looking stream. Passed through the Devil's Gate and Gold Hill. The travelling was wretched, owing to the deep roads. Palmer accompanied me and stopped whenever he could, to wet his whistle. I was welcomed cordially by all at the Ophir House.

Mar 7th. Stayed in the house most of the day. Visited the Shaft House of the Savage Mine and saw the engines and the platforms for descent into the shafts. Had the fever and ague in the afternoon and evening. A Mr Dent dined at the house.

Mar 8th. Feeling weak but otherwise better. Went to church with J. D. Hague. Heard Rev Mr Whittaker (now 1868 Bishop elect of Nevada and Arizona). Wrote to Uncle and to Dr Gray. Read "Ecce Homo". Epler and Tom Parkinson were to dinner. A wretched, fidgetty night.

1868 Mar 9th. King gave me a gold check on the Bank of California and paid my stage expenses to and from Virginia. I intended going to Carson with Gardner, but was prevented by the ague.

Mar 10th. Bid all the Virginia fellows good bye and returned to Carson. The stage was very crowded and there was scarcely room for my feet. I sat in a cramped position all the way down. Took sleeping potions at night which succeeded admirably in keeping me awake.

Mar 11th. Severe pain in my back. Read and visited Mrs Blackburn with Parker and his brother in the evening.

Mar 12th. Bid all the fellows good bye. Hank Monk, the celebrated driver of Horace Greely loafed up as I was going off+. There was quite an ovation in my honor. All my own fellows and several people of the town were at Tufley's to see me off. Two miners, acquaintances of Frank Anthony and evidently sons of Erin, were my companions inside the coach, and another rode with the driver on the box. I became heartily sick of them all before I was through with them. At Van Sickles's at the foot of the grade, we took a sleigh and begun the ascent, sometimes having to get out and walk over bare places. We now had with us a bridal party from Genoa, going up to a

+ and made a characteristic but un-printable remark.

No. 3.

The Western Union Telegraph Company.

PACIFIC DIVISION.

ALL MESSAGES TAKEN BY THIS COMPANY SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes, the sender of a message should order it REPEATED; that is, telegraphed back to the originating office. For repeating, one-half the regular rate is charged in addition. And it is agreed between the sender of the following message and this Company, that said Company shall not be liable for mistakes or delays in the transmission, or delivery, or for non-delivery, of any UNREPEATED message beyond the amount received for sending the same; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any REPEATED message beyond fifty times the sum received for sending the same, unless specially insured; nor in any case for delays arising from unavoidable interruptions in the working of their lines, or for errors in cipher or obscure messages. And this Company is hereby made the agents of the sender, without liability, to forward any message over the lines of any other Company, when necessary, to reach its destination.

Correctness in the transmission of messages to any point on the lines of this Company, can be INSURED by contract in writing, stating agreed amount of risk, and payment of premium thereon at the following rates, in addition to the usual charge for repeated messages, viz.: one per cent. for any distance not exceeding 1,000 miles, and two per cent for any greater distance. No employee of the Company is authorized to vary the foregoing.

The Company will not be liable for damages in any case where the claim is not presented in writing within sixty days after sending the message.

J. H. WADE, President,
O. H. PALMER, Secretary. } NEW YORK.

G. H. MUMFORD, Managing Agent,
JAS. GAMBLE, General Sup't. } SAN FRANCISCO.

Feb 24th 1868

Send the following Message, subject to the above terms, which are agreed to.

To W. M. Bailey 50 Westminster St
Providence R I

Telegraph me through Wells Fargo
two hundred and fifty 250 dollars
[illegible] [illegible], [illegible], [illegible] [illegible]
[illegible] [illegible]

16 ......Words. 50 1135

Rec'd by......... Sent at.............M., by.....

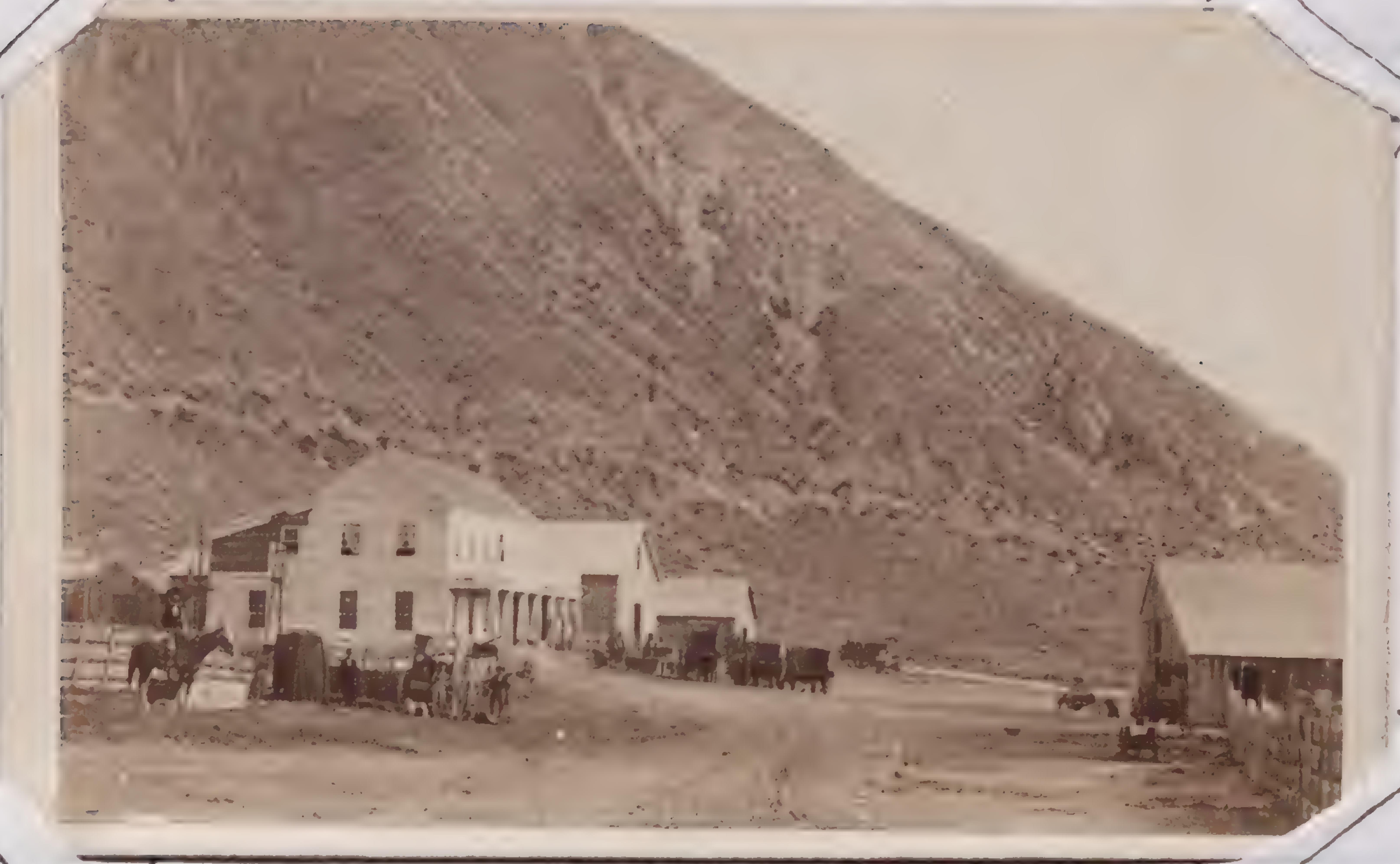
Sold 20 Green Back
for 70 c. Paid 11.35
for Telgh message

70
20

14.00
11.35

2,65

2,65

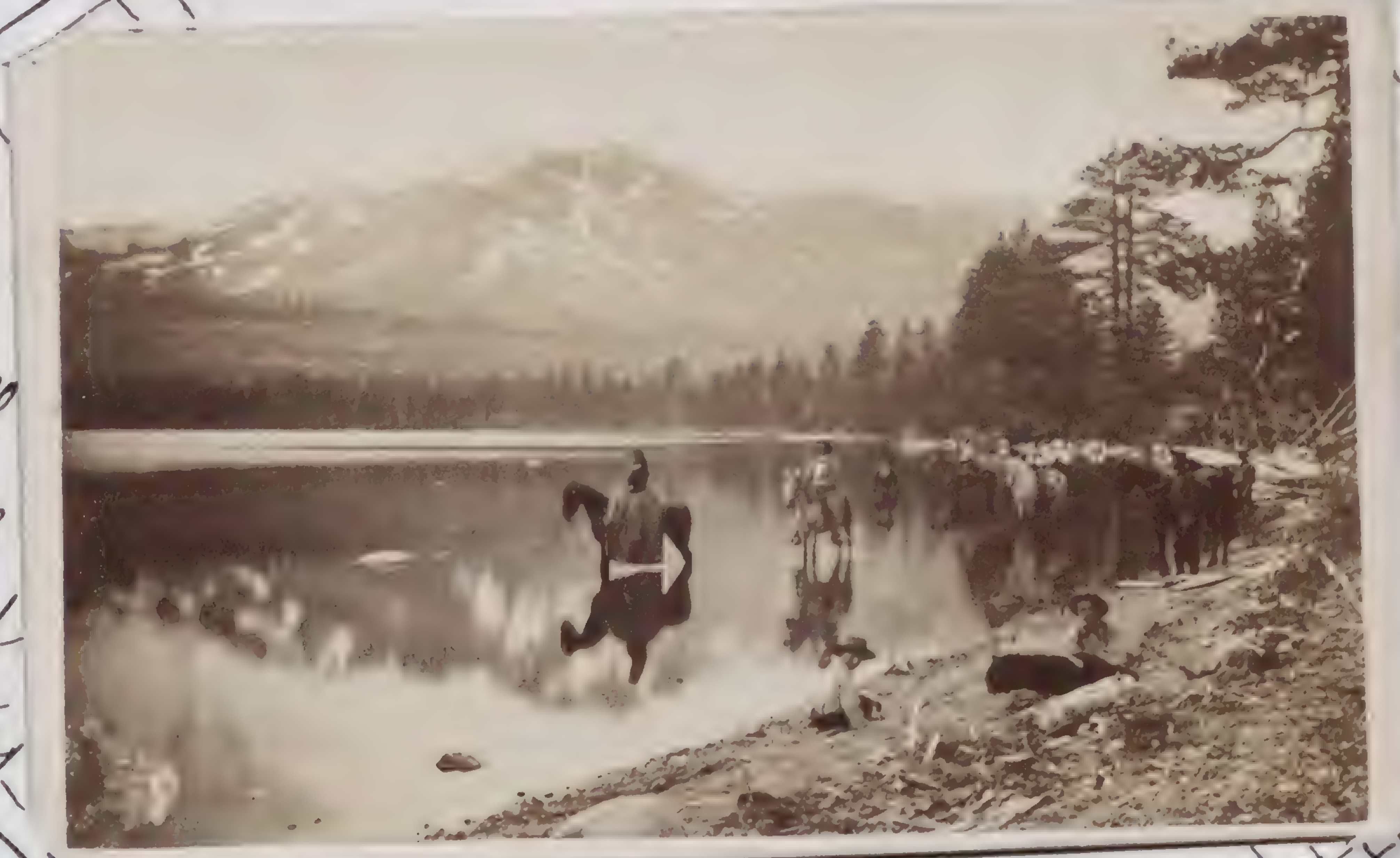


Van Sickles's Hotel
Carson Valley.

1868 party at Lake Valley. The road is very tortuous as it rises from the Carson Valley, almost doubling upon itself at times. The veiws from it back into the Basin, are most splendid. The forests rapidly rapidly increase as the road ascends the Sierra, but the Vandal wood chopper was to be seen every where, with his destructive axe. I am not going into a tirade here against the use of wood, which in Nevada is particularly necessary, but I record my humble protest against the shameful waste of these unequalled forests! The wedding party gave us a good deal of fun, and the happy ones were awfully spooney on each other. The weather demanded, or rather allowed a good deal of latitude in the way of squeezing. At each turn in the road, the driver would sing out, "lean up!" and every one was expected to embrace his female neighbor. Unfortunately I had none such. This cry it seems, was instituted by Hank Monk. Upon reaching the first summit, we went racing merrily through the snow- and under the tall pines, into Lake Valley. Occasionally it would snow violently. As long as day light continued, the drive was glorious, exhilarating! but after nightfall the storm increased and it became too cold for comfort. We dropped our way passengers at Lake Valley & Yank's Station, after which we began the tedious ascent of the second

1868 summit. By this time I was very sleepy and cold. My companions tucked themselves into the bottom of the sleigh, and I snoozed as best I might, occasionally gazing through the falling snow upon the tops of the pines far below me. I begun to be impressed with the fearful lonesomeness of the scene, when I was recalled to myself by the noise which the driver made, as he cursed his horses. This man was not the same with whom I had started from Carson. We all rose up and demanded what was the row. He informed us that we were off the track - the only solid snow thereabouts. He said the drift might be any where from fifteen to fifty feet in depth, and still it was snowing rapidly. This was by no means cheerful, as were six miles or more from the nearest station. I thought of the stories of the travellers lost in the snow upon these mountains and shuddered. We all got out and by putting our shoulders to the runners finally restored the sleigh to the track. The driver then went ahead with a lantern to explore, and finally returning, drove cautiously ahead. After passing this summit, we breathed more freely, and went dancing along at a good pace again. I was sorry not to have passed the second summit in the day time as there is a superb view from it

1868 down upon Lake Taho, one of the most lovely sheets of water in the United States. It is the source of our old friend the Truckee. It is much frequented by visitors in summer and several hotels have been built upon its banks. We reached Strawberry where we were to spend the night, at half past ten P.M. Found the station full of people of low degree, and odours of pent up breath and tobacco smoke. My mining fellow passengers and myself slept in the same room.

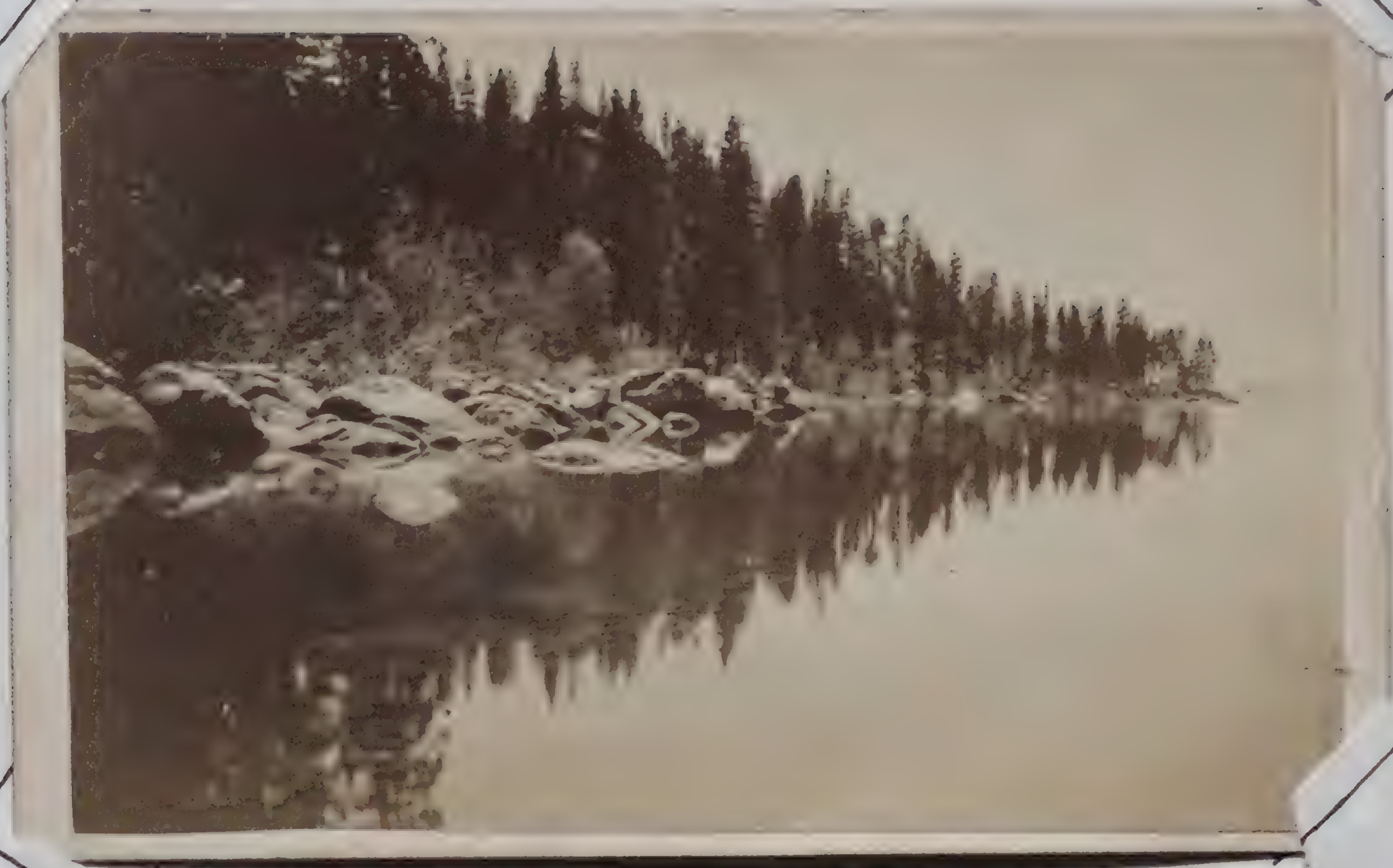


Lake Bigler or Taho
Tahlac Mt

Whitney in his Yosemite Guide Book calls Taho 1000 feet deep, and considers the valley to be the result of a local subsidence

Lake Bigler Taho
Tahlac Mt

1868 Mar 13th When I went out in the morning, I found the snow breast deep and it was still snowing. The scenery about Strawberry as indeed all along the Placerville route, is very beautiful. Left the place at half past six A.M. We changed horses and drivers every fifteen miles and finally resumed the stage, after getting out of the snow. It snowed violently until we were within fifteen miles of Placerville, where I believe it never snows. There it was raining, and the grass was charmingly green, and peach orchards in full bloom. The roads were in an exaggerated state of muddiness. I think nothing like it was ever seen out of California, or perhaps Virginia. The wheels sunk to the axles in the mire, but this did not prevent the driver from keeping his horses at the top of their speed. We rattled along upon the brink of fearful chasms, where the American river could be seen boiling and hissing far below us. One man who was outside swore to me afterwards that our wheels were over the brink at one time, and it was only by the dexterity of the driver that the stage was righted. As it was we had to get out twice to set the stage on its wheels. Once we caught one axle on the stump of a tree, and all hands had to heave in order to lift the vehicle over this obstacle. I was shut up in the stage, with the curtains down, and with the



Lake Bigler
or Tahoe

1868 two reckless miners as companions. They amused themselves by spitting on the seat in front of them, instead of out the window, to my extreme disgust. We kept jolting about as Bowles aptly says "like a grain of pop corn in a popper." I felt much like a beef steak must after a steady pounding. Every bone in my body seemed out of joint and sore. I firmly believed I should never reach Placerville in safety. If Horace Greeley had any worse experience in this drive than I had, he must be no friend to Hank Monk. I arrived finally with the vital spark still flickering, and by the time I had eaten supper, it was fanned into quite a respectable flame. I had a comfortable room to myself at the hotel. The fever seems to have left me for the present.

March 14th Drove by stage from Placerville to Shingle Springs over an awful road. It still rained violently. Many flowers were in bloom in the fields, Saw some of the original placer diggings. The whole surface of the country seems to have been turned up. There is little gold hunting done here, now, however. At Mud Springs, Mr Robert Steere, the Postmaster of the place entered the stage with his lady. Finding they were also going to the East, I made their acquaintance. We became good friends afterwards on board the Colorado. At Shingle Springs, we took cars for Sacramento and arrived there about one P.M. It was

1868 pleasant to leave the jolting stages for the easy moving cars. Took dinner at the Western Hotel. Sailed on steamer Yosemite for San Francisco at 2 P.M. and arrived at 9 P.M. Put up at the Lick House. Very rough on the bay as we crossed it.

Mar 15th Sunday. Varying rain and sunshine. Attended service at Grace Church on California St. Visited Mrs Parker and had a delightful call. Wrote to King.

Mar 16th. Clear. Called on Mr Wm Ashurner, the State Mineralogist. Afterwards went to the rooms of the State Geological Survey and Profs J. D. Whitney and Bolander. Visited Mr C. E. Watkins at his photographic gallery, and saw his new pictures of the Columbia river.

Mar 17th. Called to see Dr Bolander and Prof Whitney again but found them out. Visited Mr Watkins who kindly presented me with a set of his Yosemite stereographs. Called on Mrs Parker. St Patrick's day "in the morning" and a great stir among the Finegans. A large procession of Irishmen paraded the streets to the tune of the "Harp that once through Tara's halls". Clear and warm. A concert of clarionets harps, violins &c in the main hall of the Lick in the evening. Heard that Mr Rail of Carson City was in town and left my card for him at the Cosmopolitan. Bought several books to read on the voyage to New York.

Mar 18th Clear. Set sail on the Pacific Mail Steam Ship

1868. Colorado for Panama. I had state room "I" with four others in the room with me. The vessel is crowded and inconvenient. Wives are separated from their husbands, and there is a general gnashing of teeth. The upper deck is being repaired, and when completed will give more room. Gulls and boobies surround the ship. Passed through the Golden Gate and had a fine view of the harbor and fortifications. The water on the ship is vile. It seems to be kept in a freshly painted tank, and tastes as if it had been dipped from the "painted ocean" of which Coleridge speaks. It should be indigenous to Humboldt Valley.

Mar 19th. Clear. The coast is still in sight. Read Bowles' Across the Continent. In the evening had a game of whist. Mr Steere and lady from Mud Springs ~~are~~ fellow passengers with me on the stage from that place, are on board. My state room companions are a Mr Trine, Thulber of the Navy, and Mr Spence an Englishman; Mr Trine sometimes has his wife with him.

Mar 20th. Rather cloudy. Repairs are rapidly being made on the upper deck which will somewhat relieve the crowds below. Had a game of whist again in the evening. Read Miss Muhlbachs "Frederick the Great and his Family. It is simply trash. Water much improved.

Mar 21st Cloudy. Passed Bonita Islands in the morning. The main land is in sight. We are among the islands. Gulls very numerous. Most of the islands are awfully barren. They look as if the interior desert mountains

1868 had been cast into the sea. Played whist in the evening.

Mar 22d. Passed Point Lazaro about 20 minutes of 8 A.M. Clear. High head lands with low connecting land, horribly barren. The country is rocky or sandy and channeled into little ravines. An English minister Rev Mr Elkington from Sandwich Islands read the Episcopal service in the morning. In the afternoon several other divines made remarks. I only attended the morning service and that of the evening. The latter was Presbyterian.

Accidentally introduced myself to a German, Mr Froebel, a friend of J. D. Hagues. He is a fellow of much and varied information.

Mar 23d. Clear and hot. No land in sight. Off the Gulf of California. Water rather rough. Breezy and cool towards night. Had my usual game of whist.

Mar 24th. Clear and warm. Within sight of the coast of Mexico, a beautiful landscape, with bold shores and high mountains. Saw the place where the Golden Gate was burned. Her wheel house is still visible. The views to day have been most charming. The colors are very soft and delicate and seen through a veil of mist. The shores in places are thickly wooded - but the trees are mostly brown. It is the dry season. Saw the constellation of the Southern Cross.

1868. Mar 25th A volcanoe in sight in the morning. Passed along by the Sixty mile beach. We reached Acapulco at 3. P.M. After the usual formalities, the passengers were allowed to go ashore. It was a cool afternoon, a most extraordinary thing in Acapulco and I concluded to visit the town with a party who were going. The Steeres, Froebel, Dr Taylor & lady and myself formed the party. We took quite a walk about the town and saw pretty much all the sights. The houses are made of "adobe" and are roofed with tiles. The streets are narrow and paved with large oblong blocks of stone, while the side walks are raised several feet above them. The stores are neat and well stocked with goods for which awfully high prices are asked. In the market place and along most of the streets, are fruit dealers ever anxious for strangers to buy: and water carriers pass with earthen ware vessels neatly poised upon their heads. One is constantly pestered by little boys and girls who thrust boquets of flowers into his hands, giving him to understand that such are "presents". If he is fool enough to take them, a demand is then made for money in return for the so called gift. Not many Americans are such young birds as to be caught by this kind of chaff, but though they do not suffer from imposition, they are still the victims of importunity. A sharp answer is finally necessary in order to rid ones self of these pests who swarm thicker than musquitoes. The church is an

1868 old building, half ruined by an earth quake, crumbling without and dirty within. The usual array of wax figures and tinsel, alike filthy, show Romanism as it exists in most tropical towns. The priests after conducting the services in the morning, often attend a cock fight in the after noon. Two little Mexican boys stand at the door of the edifice, and whisper the entering visitors to remove their hats, and at the same time exact a fee of half a dollar from those who are coming out. The American consul's house into which I glanced, is the most inviting looking place I saw in Acapulco. It was pleasant to see the old flag waving over it, and in the cool rooms, to note the hammocks swinging in the breeze. Most forlorn little donkeys were seen in the streets. Wheeled vehicles, I believe are perfectly unknown. There are no roads into the interior of the country, mere mule tracks forming the only communication. Most of the news, even concerning Mexican affairs, is brought by the American ships from San Francisco or New York, and the trade with these is probably all that keeps the town alive.

A gun is fired about half an hour before the sailing of the vessel, to allow all passengers absent in the town, to return in time. There is always a great rush for the boats when the signal is heard, as no one is at all anxious to be left

1868 behind in so hot and uncomfortable a place. After reaching the ship I found great difficulty in getting on board, as our boat was ordered by petty officials first to one side and then to the other. I finally lost all patience and seizing an opportunity, jumped for the stairway. The natives stipulate for a certain definite sum when one starts with them, but upon his return, demand twice the sum, when they think him too hurried to make a fuss about trifles. A little earnest English, or Spanish if one happens to know it, accompanied by a motion as if to throw them overboard has a most beneficial effect in reducing their charges.

If a coin is thrown into the water these natives will dive for it and are always successful in securing it before it sinks far. Putting that which they have already obtained, in their mouths, they eagerly look out for more, and the passengers are always ready to give it them for the sake of amusement. Just before the steamer started I saw Mr Bellows for a few moments. He was Purser on the Constitution last year when I came up.

Mar 26. Feeling a little sea sick. Sailing very near the coast. Had a fine view of a whale. He turned up side down for my benefit and showed me his tail fin. A thunder storm in the evening threatened a serious blow, but passed off. It made a gorgeous sky.

Mar 27. Exceedingly hot. Porpoises seen now and then.

Panama from the steamship.

1868 us here. We had expected to cross the Isthmus immediately but were detained all day, that the Ocean Queen on the other side, might prepare for our reception. We were to have met the Rising Star. Many of the passengers went ashore, but by the Doctor's advice I stuck to the ship. Took a sketch of the bay. There are several American men of war here.

April 2d. Crossed the Isthmus. "A thing of beauty is a joy for ever" and consequently I enjoyed my second visit to these tropical scenes almost as much as the first. Upon reaching Aspinwall, I found I had a stateroom all to myself on the hurricane deck. Got Froebel in with me. Mr Spence had the room adjoining on the other side of the ship - and a door could be opened between us.

Apr 3. Very rough. Sea sick. Lay in bed most of the day. I have a capital waiter.

April 4 Much better. Went to all my meals except breakfast. Read "My Novel". Clear and breezy. Got my trunk up from below.

April 5th. Passed Nevassar early in the morning. Clear, warm & calm. Passed along the coast of Cuba. Attended service in the morning. Feeling quite well. The Cuban coast shows well marked terraces.

Apr 6th. Passed one of the Bahamas in the morning. Read Herbert Spencer. Clear, calm.

Apr 7th. Rather rough. Sick again. Rain storm.

1868
April 8th Very rough. Several vessels in sight during the day. Rather sick. Better in the evening.

April 9th Cold and breezy. Feeling quite well and taking my regular meals. Vessels occasionally in sight; among them a steamer. A little child born on the ship was christened Charles Seaborn Hughes. At noon we were 220 miles from New York.

Apr 10th. Violent snow storm. Cold. We were obliged to beat about Sandy Hook a long time before being able to proceed up the "narrows". Landed about 12 o'clock. Froebel and I stayed at the Brevoort. The next night I started for Providence on the steamer of that name and arrived on the morning of Easter Sunday.

Nabalus Boot

Viburnum p

Arnica moll

J. S. Merriam

29 William

[illegible] Journal

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